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## Warsaw Pact Theater Forces—1985

Interagency Intelligence Memorandum

**Secret** 

NI IIM 85-10006 September 1985

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### Warsaw Pact Theater Forces—1985

Information available as of September 1985 was used in the preparation of this Memorandum.

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NI IIM 85-10006
September 1985

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Scope Note	This Interagency Intelligence Memorandum reviews recent developments and trends concerning Soviet and Warsaw Pact theater forces and provides a concise compilation of data about weapon characteristics and deployment levels. It addresses these forces, first by service and then according to region, as they would be used in the event of war. Background briefs describe selected concepts, problems, and force subsets that are important for understanding these forces, their missions, and their future direction.	25X
	This Memorandum was produced under the auspices of the National Intelligence Officer for General Purpose Forces. It was compiled by of the Directorate of Intelligence, Central Intelligence Agency, and was coordinated within the Central Intelligence Agency; the Defense Intelligence Agency; the National Security Agency; the Bureau of Intelligence Research, Department of State; and the military services.	25X 25X 25X

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**Theater Forces** 

— Widespread cynicism and corruption, fostered by

In peacetime, civilian direction of policy for the Soviet military comes from the Communist Party's Politburo and, in particular, from those members who deal with national security affairs—the Defense Council. The Ministry of Defense and the General Staff administer the armed forces, working through the military services, the military districts (MDs) around the USSR, and the groups of forces stationed in Eastern Europe. A Combined Command of Warsaw Pact Forces, located in Moscow, lacks control over any Soviet or East European forces but does plan force development and allocation in the event of war with NATO and coordinates these plans with the East European member states.

The Supreme High Command also controls the use of strategic nuclear forces for theater warfare and can direct the use of intercontinental systems against theater targets if need be. With the growth of the SS-20 missile force, however, ICBMs are less likely to be diverted for theater use. Although intended primarily for strategic missions, some SS-N-6 missiles on Yclass submarines—particularly those in or near home ports—could be used in theater strikes.

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Juclear Weapons for Theater War	
the Soviets have a broad range of tactical nuclear delivery systems their air, ground, and naval forces in addition to those elements their strategic forces that could contribute to theater war. Some ast European tactical aircraft, missiles, and field artillery also have deliver nuclear weapons, but the Soviets would have to rovide the warheads from storage sites in Eastern Europe where help keep weapons for both their own and their allies' systems.  The verthe last 20 years, the USSR has shifted away from its heavy in the site of the many site on tactical ballistic missiles for nuclear delivery to rely ore on tactical aircraft. Aircraft probably would deliver up to half the weapons in an initial nuclear strike to support frontal perations.  The sepite the emphasis on aircraft systems, the Soviets have not eglected other means. They have increased the number of tactical issile launchers and improved these systems' performance. They so have introduced nuclear-capable artillery. The Soviet Navy has aclear warheads for antiship missiles, some SAMs and torpedoes, swell as nuclear depth charges for use with antisubmarine eapons.	Longer range missile and aircraft systems could deliver strikes well beyond the battlefield against command and control facilities and important installations, such as airfields and missile bases supporting an enemy's nuclear weapons. These systems include the Backfire, Badger, Blinder, and Fencer aircraft in strategic air armies (see page 13), the Strategic Rocket Force's SS-20s and SS-4s, and the Navy's SS-N-5 ballistic missiles on a few old submarines (see page 5). The development of long-range cruise missiles that can be launched from aircraft, submarines, or off-road vehicles is adding new dimensions to the Soviet nuclear threat in a theater conflict.

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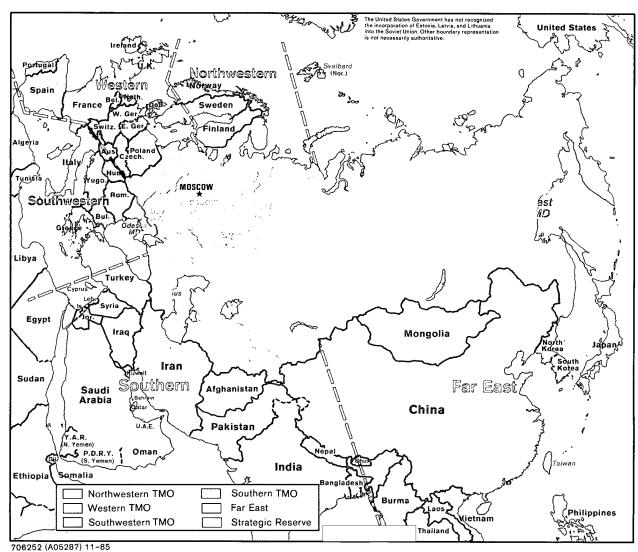
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#### Soviet Military Districts and Theaters of Military Operations



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#### **Ballistic and Cruise Missiles**

The Soviets have a variety of missiles that can strike targets anywhere from just beyond the front lines to the full depth of a theater of war. They are fielding improved versions of most of the current systems and are introducing new air-, ground-, and sea-launched cruise missiles as well. Force levels and deployment locations for some systems depend in part on positions taken for arms control negotiations, either to influence or respond to NATO decisions about corresponding systems.

#### Strategic Ballistic Missiles

SS-N-5. The Soviets have retired the SS-N-5s on nuclear-powered H-II-class submarines because launchers on nuclear units are accountable under SALT I and their dismantlement compensates one for one for the activation of launchers for new SLBMs. The medium-range SS-N-5 is still carried on six diesel-powered G-II submarines assigned to a Baltic Sea base and seven based in the Sea of Japan.

SS-4 and SS-5. The Soviets have continued to deactivate SS-4s and probably will have phased them all out by mid-1986. The last SS-5s were deactivated by early 1984.

SS-20. Between 1977 and mid-1984, the Strategic Rocket Forces fielded 378 mobile launchers for this MIRVed ballistic missile at 42 operational bases across the entire USSR. Each base supports a regiment of nine launchers, housing them in separate garages with sliding roofs that allow firing on short notice. In the second half of 1984, the Soviets began deactivating bases in the central USSR, probably to convert them to support a new mobile ICBM, while simultaneously building new SS-20 bases in the eastern and western USSR. They probably intend to relocate the launchers from the deactivated bases to the new bases, making it difficult for the United States to assess the size and status of the force. At the end of 1984, the Soviets probably had 414 SS-20

#### Missiles and Rocket Launchers

	End 1984
Short-Range Missile and Rocket Launchers	
SS-1 Scud B	620
FROG-7	700
SS-12 Scaleboard	130
SS-21 Scarab	75
SS-23 Spider	0
Total	1,525
Intermediate-Range Missile Launchers	
Land Based	
SS-4	112 a
SS-20	414
Subtotal	526
Sea based	
SS-N-5	39
Total	565

<sup>a</sup> This figure includes 18 launchers from deactivated bases that probably were being moved to new bases.

launchers, including 396 at 44 operational bases and 18 launchers probably being relocated to two new bases. The number of launchers at operational bases probably will fluctuate during 1985 as the Soviets both deactivate and build more bases. Current construction and the overall structure of the force, however, indicate that the SS-20 force will grow until it reaches 450 to 500 launchers by about 1987.

New Systems. A variant of the SS-20 has been developed and may serve a function similar to the US Emergency Rocket Communications System. The Soviets also are working on a new missile that could be available in late 1986 to replace the SS-20.

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Ballistic M	issiles		
Meters	SS-4	SS-N-5	SS-20
25	Λ		
20			
15		А	
10			
5			
0			
RVs	1	1	3 MIRVs
Range	2,000 km	1,400 km	4,600 km, CIA; 5,000 km, DIA
CEP	2,300 m	1,900-3,700 m	285 m
Operational mode	Soft pads or quadruple silos	Submerged	Mobile
Year operational	1958	1963	1977
			307102 11-85

#### Land-Attack Cruise Missiles

The Soviets are testing a family of cruise missiles (similar in some ways to the US Tomahawk) with a maximum range of more than 3,000 km. The airlaunched version, the AS-15, became operational on Bear H aircraft in 1984. The sea-launched version, the SS-NX-21, has been tested from a modified V-III-class attack submarine and could become operational on that class in 1985. It also could be deployed on M-, S-, Y-, and Akula-class attack submarines. The ground-launched version, the SSC-X-4, has been tested from a new mobile launcher and may be operational in late 1985.

Another cruise missile, the SS-NX-24 (formerly referred to as the BL-10), is designed to be fired from submarines and possibly from a ground-based launcher. A Y-class submarine modified to carry SS-NX-24 launch tubes conducted the first at-sea test firings in late 1984, but the missile probably will be deployed on a new class of submarine. The SS-NX-24 is capable of supersonic, high-altitude flight to ranges exceeding 2,000 km; it is intended to attack land targets with a nuclear warhead. It could become operational in 1986.

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SSB	Missiles	Propulsion	Year Operational
G-11	3 SS-N-5s	Diesel	1962
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#### **Short-Range Ballistic Missiles**

SS-12 Scaleboard. The SS-12 Mod 2, previously known as the SS-22, is more accurate than the SS-12 Mod 1. As a response to Pershing II and GLCM deployments in Europe, the Soviets have moved three SS-12 Mod 2 brigades from the western USSR into Central Europe. Two brigades are now in East Germany; the third is in Czechoslovakia. All three probably are expanding from 12 to 18 launchers. The construction of concrete launchpads and facilities for mating missiles and warheads indicates that the Soviets will keep part of the force on alert. Maintenance and training needs are likely to keep the fraction on alert to about a third. This practice and the adoption of command and control equipment used with the SS-20 program improve reaction time and enhance the prospects for preemptive strikes against NATO targets. Even at maximum range, the SS-12 would hit its target only nine minutes after launch. It could be used against nuclear delivery systems and important command and control facilities.

SS-21. This division-level system has replaced the FROG-7 in some Soviet divisions in East Germany, Czechoslovakia, and in the western USSR. The East Germans, Czechoslovaks, and Syrians are buying some for their own forces. The Soviets began fielding a more accurate version, the Mod 2, in 1983.

New Systems. Front and army-level units have begun receiving the SS-23, a solid-propellent missile intended to replace the Scud B. An improved SS-23 and SS-12 will come along later.

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Land Attack Cruise Missiles		Warheads	Speed	Range	CEP	Year Operational
\$\$C-X-4 <del>}</del> = ‡ = = >	SS-NX-21 (developmental)	1	850 km/h	3,000 km	100 m	1984
SS-NX-24 (dev	relopmental)	1	2,500 km/h	2,000- 3,000 km	?	1986

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hort Range Ballistic Missiles	Maximum Range	CEP at 2/3 Range	Year Operationa
-1 Scud B	300 km	500-900 m	1961
ROG-7	70 km	380 m	1965
-12 Scaleboard	925 km (CIA) 900 km (DIA)	600-800 m	1965
-21	120 km	200-300 m	1977
1-23	500 km	250-350 m	?

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Air Forces	Secret	25 <b>X</b> 1
Introduction		
Soviet Air Forces are still making adjustments after a major reorganization that took place in the late 1970s. The current structure improves flexibility and simplifies command and control, giving regional combinedarms commanders more direct control over air and air defense forces. The number of aircraft in ground	Naval Aviation has a variety of aircraft for reconnaissance, antiship, and antisubmarine strikes, as well as a number of land-based and shipborne fighters that could be used to defend task groups close to the USSR or to support amphibious landings on nearby shores. Each of the four naval fleets controls its own	
attack and air-to-air combat roles available to support front campaigns continues to increase, at the expense	air forces.	25 <b>X</b> 1
of interceptors for strategic air defense.  Strategic aviation, which consists of short-, intermediate-, and long-range bombers for conducting theater and intercontinental strikes, comprises five strategic air armies. One of these armies has an intercontinen-	Military Transport Aviation (VTA) is responsible for rapidly moving troops, equipment, and supplies, especially in airborne operations. Most of the intermediate- and long-range transport aircraft belong to VTA units. Additionally, Aeroflot, the civil airline, also	25X1
tal mission; the other four are meant for theater operations and would be allotted to support TMO	would move troops and materiel in wartime.  Regardless of component, fixed-wing aircraft are	25 <b>X</b> 1
Front Aviation includes fighter-interceptors, fighter-bombers, and reconnaissance aircraft. These are orga-	organized into regiments as the basic structural unit.  Depending on mission and type of aircraft, regiments have 20 to 45 aircraft divided among three squadrons.  Normally, an airfield supports one regiment of the	25X1
nized as air forces of military districts or groups of forces so that when fronts form from these entities in wartime, their commanders will have direct control over air assets. East European air forces, which vary in function and structure, also would be controlled by the front commanders in war. (Some 1,200 Soviet interceptors, however, are controlled separately by the National Air Defense Forces because of their strategic role in defending against bomber and cruise	Primarily to counter the Chinese threat, tactical aviation experienced considerable growth from the mid-1960s through the mid-1970s, but the number of aircraft has remained generally constant since then.  More important was the large-scale effort to reequip the Air Forces with new aircraft that began in the early 1970s. This effort continues, and the advanced	25X1

early 1970s. This effort continues, and the advanced technology of new aircraft and weapons—the MIG-31 Foxhound, MIG-29 Fulcrum, and SU-27 Flanker makes the Air Forces far more capable than in the past. Nearly all modern fighters can operate in adverse weather. More than half can attack other aircraft at medium and high altitudes from all aspects and have a limited capability to attack low-altitude targets. The SU-24 Fencer A/B/C/D, MIG-27 Flogger D/J, and SU-17 Fitter D/H/K can carry twice the ordnance of the older SU-7 Fitter A, and deliver it more accurately.

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tion.)

missile attacks and are not discussed in this publica-

Army aviation provides aerial fire support, tactical

at the front, army, and division levels. Although

currently only helicopters are assigned, the SU-25

Frogfoot also may be allocated to army aviation,

gistic support from the Air Forces.

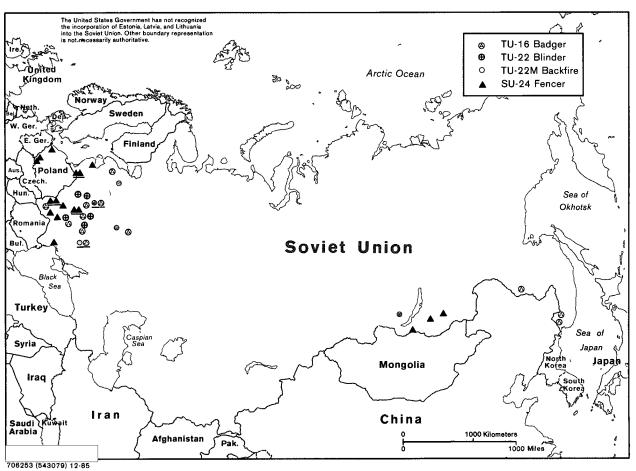
reconnaissance, and air mobility to the ground forces

possibly at the front level. While operationally subor-

dinate to the ground force commander, army aviation

components receive administrative, technical, and lo-

#### Soviet Bomber Regiments for Theater Operations



The strategic air armies and fleet air forces are receiving the TU-22M Backfire; VTA is modernizing with the IL-76 Candid and will soon receive a new heavy transport. The inventory of attack helicopters is growing, and a new large assault transport helicopter is replacing a 25-year-old model that has a much smaller lift capacity.

Air support to ground force operations has received new emphasis as evidenced by changes in front aviation and the development of Army Aviation. As part of the reorganization in the early 1980s, about half of the fighter-interceptors in the National Air Defense Forces were resubordinated to air forces of the military districts. These MDs and groups of forces that already had some fighter regiments have used much

of the newly gained strength to augment their ground attack capability. Some fighter regiments have been converted to this role, and others have been retrained. Army Aviation, created in the reorganization, is growing and is receiving better attack helicopters, including improved versions of the MI-24 Hind E. It probably will soon have the MI-28 Havoc and may also eventually receive the SU-25 Frogfoot. Thus, the front air forces are becoming better equipped and organized for their missions of striking targets, particularly enemy nuclear weapons and delivery systems, ahead of the ground armies, with Army Aviation providing close air support over the battlefield. These changes are meant to contribute to the high rates of advance now envisioned in the ground offensive.

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Bombers			
Force Improvements	Bombers		25X <sup>2</sup>
Four of the five strategic air armies are dedicated to		End 1984	
supporting theater operations. Three of these are opposite NATO: one has the TU-16 Badger, TU-22	Air Force		
Blinder, and TU-22M Backfire bombers; and two	TU-16 Badger		
have SU-24 Fencer bombers and some fighter-inter-	TU-22 Blinder		
ceptors. The fourth air army for theater support—	TU-22M Backfire		
opposite China—has TU-16s, TU-22Ms, and SU-24s.	SU-24 Fencer		
The Navy's intermediate-range bombers are in the	Total		
fleet air forces—three opposite NATO and one in the	N 14 14		
Far East.	Naval Aviation		25 <b>X</b>
	TU-16 Badger TU-22 Blinder		
TU-22M. The Backfire C is currently in production;	TU-22M Backfire		
about 30 are built per year. The C model may perform better at supersonic speeds and at higher	Total		
altitudes than the older model. A third Air Forces			25X
regiment is receiving the Backfire C, and the Navy			2070
will soon convert its first combat unit to the new			
model. The Soviets have converted 11 of their 37			
intermediate-range bomber regiments to the Backfire.			
All conversions have occurred in units formerly			
equipped with the TU-16.			25X
SU-24. Two-thirds of the Soviets' Fencer bombers are			
assigned to air armies that support TMOs and one-			
third to tactical units (see page 17). Production contin-			

SU-24. Two-thirds of the Soviets' Fencer bombers are assigned to air armies that support TMOs and one-third to tactical units (see page 17). Production continues at a rate of about 100 aircraft per year, and production of the Fencer C has recently ended in favor of an improved model, the Fencer D. The D model probably is fitted for air-to-air refueling (from another SU-24 or from the developmental IL-76 Candid tanker). By late 1984 it had been provided to 10 regiments. Specialized Fencer variants for reconnaissance and electronic countermeasures have begun to replace 20-year-old YAK-28 Brewers.

Bombers	Maximum Operational Radius <sup>a</sup> With	Missiles	Bombs	Maximum Speed	Year Operational
TU-16 Badger		2,300 km 2 AS-5s or (about half car	3,100 km 2,800 kg n carry missiles) <sup>b</sup>	1,000 km/h	1954
TU-22 Blinder		2,500 km 1 AS-4 (about half car	2,900 km 2,800 kg ery the missile)	1,450 km/h	1962
TU-22M Backfire	CIA Estimate	2,590- 3,050 km	3,380- 3,980 km	1,950 km/h	1974
		2 AS-4s (can carry up t	4,600 kg to three AS-4s)		
	DIA Estimate	4,700 km 2 AS-4s	5,400 km 4,600 kg		1974
SU-24 Fencer			2,000- 2,300 km 900 kg	2,350 km/h	1974
V	<sup>a</sup> The radius given is for a mission fl <sup>b</sup> Some naval TU-16s can carry one				

mum	Maximum	Year	

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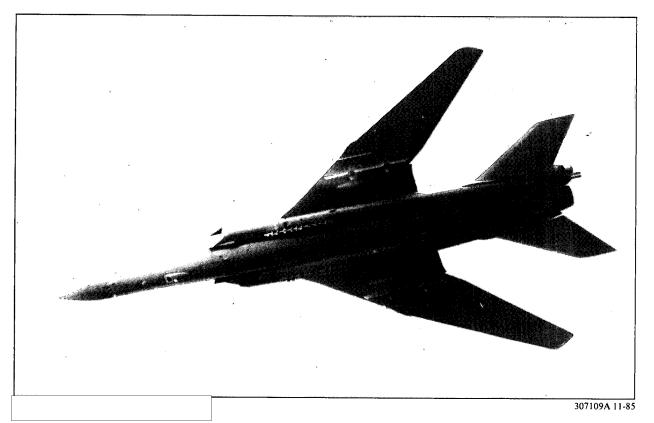
ASMs	Maximum System Range	Maximum Speed	Year Operational		Maximum System Range	Maximum Speed	Year Operational
AS-2 kipper	250 km	1,750 km/h	1961	AS-5 Kelt	160 km	1,300 km/h	1965
AS-4 kitchen	460 km	3,750 km/h	1967	AS-6 kingfish	470 km	3,200 km/h	1970
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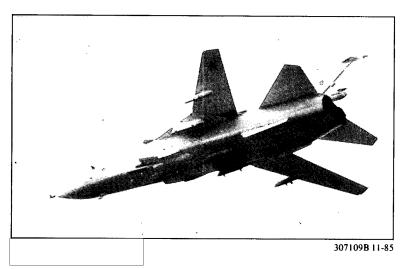
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#### **TU-22M Backfire Bomber**



#### **SU-24 Fencer Bomber**



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Tactical Combat Aircraft		
Force Improvements	Combat Aircraft	
One new fighter-interceptor, the MIG-29 Fulcrum,	End 1984	
became operational during 1984 with three units in	End 1704	
the western USSR. The Soviets have converted 18	Fighter-interceptor	
regiments from air-to-air combat or training missions	Air Forces	25X′
to ground attack since the 1980 reorganization of the	SU-15 Flagon	
Air Forces and Air Defense Forces and have formed	TU-128 Fiddler	
three new ground attack units.	YAK-28 Firebar	25 <b>X</b>
	MIG-21 Fishbed	
MIG-23 and MIG-27. Currently produced MIG-23	MIG-23 Flogger	
Flogger G fighter-interceptors and all MIG-27 Flog-	MIG-25 Foxbat	
ger J ground attack aircraft have improved avionics	MIG-29 Fulcrum	
and equipment to counter infrared censors on enemy	MIG-31 Foxhound	057
missiles.	Attack	25X
SIL 24 A new verient of the SIL 24 with a language	Air Forces	
SU-24. A new variant of the SU-24 with a longer nose	MIG-21 Fishbed	
(the Fencer D) will fill strike, reconnaissance, and electronic warfare roles and is equipped for air-to-air	SU-7 Fitter SU-17 Fitter	
refueling (see page 13).	SU-24 Fencer	OEV
refueling (see page 13).	MIG-23/27 Flogger	25 <b>X</b>
SU-25. Two squadrons of SU-25 Frogfoot are de-	SU-25 Frogfoot	
ployed in Afghanistan, and the Soviets have begun to	Navy	
field this attack aircraft in the USSR with combat	SU-17 Fitter	
units that are to operate in direct support of the	YAK-38 Forger	
ground forces. The Czechoslovak Air Force has ac-	Reconnaissance or electronic warfare	
quired a dozen SU-25s.	Air Forces	25 <b>X</b>
	MIG-21 Fishbed	
MIG-29. This aircraft was first fielded in the western	YAK-28 Brewer	
USSR in December 1983. The MIG-29 Fulcrum has	MIG-25 Foxbat	
better performance for close-in maneuvering than	SU-17 Fitter	
older Soviet fighters and a much better radar and air-	SU-24 Fencer	
to-air missile; it is assessed to be able to attack low-	Navy	
altitude targets from any aspect. Eventually it may be	TU-95 Bear	
used as a fighter-bomber.	AN-12 Cub	25 <b>X</b>
	Total	
Systems Under Development		25X
Modified YAK-38. A modified Forger began flight		
tests in 1984, and the Soviets probably plan to test it		
from a new ski jump ramp at a test facility on the		
Black Sea coast. Similar ramps could be added to		
Kiev-class aircraft carriers or built into future ships,		
enabling them to handle improved vertical or short		
takeoff and landing (V/STOL) aircraft, such as the		

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modified Forger.

AAMs				
	Principal Carriers	Max Range	Guidance	Year Operational
AA-2 Atoli	MIG-21	7.5 km	Semiactive radar or infrared seeker	1960
AA-7 Apex	MIG-23	18.5 km	Semiactive radar or infrared seeker	1974
AA-8 Aphid	MIG21, MIG-23	5.5 km	Infrared seeker	1975

Tactical Combat Aircraft					
	Maximum Operational Radius <sup>a</sup>	Maximum Payload	Maximum Speed	Year Operational	
MIG-21 Fishbed J/N	400 km with 4 AAMs	1 metric ton	2,350 km/h	1968/73	



MIG-23	910 km with	2 metric	2,500 km/h	1972/78
Flogger B/G	6 AAMs	tons		

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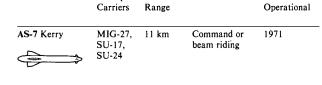
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Guidance

Year



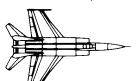
MIG-27 Flogger D/J	815 km with 6,500-kg bombs	4 metric tons	1,800 km/h	1975/78	
MIG-25 Foxbat B/D	900 km (reconnais- sance)		3,000 km/h	1972/74	



Max

Principal

**ASMs** 



MIG-25 1,425 km with 3,000 km/h 1980	Foxbat E	6 AAMs		207111 11
MIG-25 1,425 km with 3,000 km/h 1980	E LAF	( A A M -		
	MIG-25	1,425 km with	3,000 km/h	1980

AS-9	SU-17, SU-24	120 km	Antiradiation homing	1975
AS-10 Karen	MIG-27, SU-17 SU-24	10 km	Semiactive laser	1976
AS-12	SU-24	30 km	Antiradiation homing	1981
AS-11	MIG-25, SU-24	250 km	Antiradiation homing	1981
AS-14	SU-17,	10 km	Semiactive	1980

laser

operational by late 1985. The Flanker may have been tested with arresting gear at the Black Sea test facility to evaluate it for use with the new aircraft carrier now under construction (see page 49).

SU-27. Airframe changes apparently have remedied the Flanker's aerodynamic and structural problems, and the modified version has entered initial series production. Despite production problems most likely involving its engines and radar, it could become

RAM-M. With long wings like those of the US TR-1, this aircraft may be intended for high-altitude reconnaissance with signal or imagery collection systems. It may be operational in the late 1980s.

RAM-Q. The RAM-Q appears to be an experimental aircraft and not a prototype attack aircraft.

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MIG-27,

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	Maximum Operational Radius <sup>a</sup>	Maximum Payload	Maximum Speed	Year Operational		Maximum Operational Radius <sup>a</sup>	Maximum Payload	Maximum Speed	Year Operational
YAK-38 Forger A	150 km with 2 250-kg bombs	1.2 metric tons	1,200 km/h	1974	SU-25 Frogfoot	445 km with 4 250-kg bombs	4 metric tons	1,000 km/h	1981

Fitter D/H 6,500-kg tons bombs

695 km with

4 metric

2,220 km/h

2,650 km/h

1976-77

1974

SU-17

MIG-29

Fulcrum

1,165 km with 3.5 metric 4 AAMs tons

SU-24 1,500 km with 8 metric Fencer A 10 250-kg tons bombs

SU-27 1,500 km with 4.2 metric flanker 6 AAMs tons

<sup>a</sup> The radius given is for a mission flown mostly at high altitudes at subsonic speeds (except for the Foxbat, which is assumed to fly at over twice the speed of sound)

about 2,450 km/h

about 2,450 km/h 1984

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		25
Transport Aircraft		
Force Improvements	Principal Transport Aircraft	
The delivery of IL-76 Candid transports is increasing	End 1984	
the capability of Soviet Military Transport Aviation		
(VTA) to move military forces over long distances.	Military Transport Aviation	25)
This gain in airlift capability has been largely offset,	AN-12 Cub	
however, as the airborne forces have acquired more	AN-22 Cock	
armored equipment. The entire lift capacity of the	IL-76 Candid	
VTA would be required to move either one complete	Subtotal	
Soviet airborne division or six airborne maneuver	Other Forces	
regiments and could take several days.	AN-12 Cub	25
TI #4 TEL 14	Total	
IL-76. The jet-powered Candid, which is replacing	Aeroflot	
most of the aging AN-12 Cub medium transports, has	AN-12 Cub	
twice the Cub's maximum payload and reduces by	IL-76 Candid	
about 40 percent the number of flights required to	Total CA	
move a unit. So far, nine of the Soviets' 16 AN-12 transport regiments have converted to the IL-76, and	Note: These figures exclude the large inventory of Aeroflot civil passenger aircraft, which could be used to transport the personnel	
another has begun conversion. (Three other regiments	of military units; they also exclude various small civilian and	
have the AN-22, a heavy-lift transport that can carry	military cargo transports. Some 30 of the Military Transport Aviation AN-12s are deployed temporarily in Southeast Asia and	
outsized equipment; and another, a training regiment	Africa, providing airlift support to Soviet client states.	
that has both AN-12s and IL-76s, has acquired some		
Candid tankers as well.)		25 25
		20
This will enable them to maintain the pace of modern-	Systems Under Development	
ization of the transport force, as well as to produce	•	
modified versions of the aircraft for other roles.	IL-76 Modifications. The Soviets have developed	25
	modified versions of the IL-76 for use as an AWACS	25
	aircraft and a tanker. Two IL-76s support the long-	
Civil Airlift Capacity. Passenger aircraft of Aeroflot,	range cruise missile program as telemetry collectors,	
the Soviet civil airline, could be used to transport	and at least one has been modified for use as a laser	
troops and materiel. During each spring and fall troop	weapon test bed.	25
rotation, Aeroflot conducts some 800 to 1,000 special		
passenger flights to Eastern Europe over a two-week	Condor. The Soviets continue the development of their	
period, plus flights to Mongolia, Afghanistan, and the	new heavy transport, the Condor, and are building a	
Soviet Far East. With only about 165 AN-12s and 50	second prototype. Development of this aircraft began	
IL-76s in its cargo fleet, however, the airline could		
provide only limited support for movement of heavy		
equipment.		25

Transport Aircraft	Maximum Paratroop Radius a	Maximum Airlift Range <sup>a</sup> With Maximum Payload	Average Speed	Year Operational
AN-12BP Cub	1,870 km (CIA) 2,520 km (DIA) with 7,200 kg	1,390 km (CIA) 1,480 km (DIA) 20,000 kg	590 km/h	1959
AN-22 Cock	3,200 km with 45,000 kg	2,350 km 80,000 kg	660 km/h	1967
IL-76T Candid	3,250 km (CIA) 4,780 km (DIA) with 14,750 kg	3,650 km (CIA) 5,690 km (DIA) 40,000kg	770 km/h	1974
AN-124 Condor (developmental)			800 km/h	1987-88



a The radius and range given are for missions flown mostly at high altitudes.

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in the early 1970s but has been delayed, most likely by technical difficulties in building a suitable fuel-efficient jet engine and in producing structural components from modern composite materials. If no more major problems occur, the Condor could be operational by 1987 or 1988.

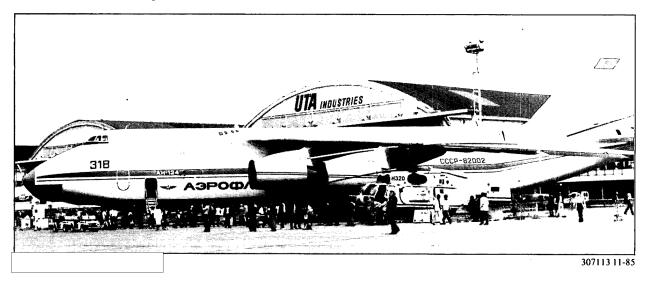
The new transport is comparable in size to the US C-5A, but is estimated to have a larger payload. Its capability to transport outsized and very heavy cargo is considerably greater than that of the aging AN-22, which it will eventually replace.

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#### **AN-124 Condor A Transport Aircraft**



The Airborne Force

The Airborne Troops (commonly known by their Russian initials, VDV) are an elite element of the Soviet military establishment. The VDV is a branch of the Ground Forces but is earmarked as a reserve of the Supreme High Command. In military operations, therefore, the highest level of the Soviet command will control the employment of these forces. The VDV is meant to operate as part of combined-arms formations that would link up with the airborne unit after only a few days rather than independently in power projection or intervention roles.

The Soviets have eight airborne divisions. Five full divisions of about 7,000 men are kept at a high level of readiness in the USSR. A full division and most of the major elements of another are in Afghanistan. A smaller training division of about 4,000 men in the Soviet Union is regarded as not ready.

Since the early 1970s, the Soviets have considerably strengthened the ground mobility and firepower of the airborne divisions by

introducing the BMD family of armored fighting vehicles. Almost every airborne division has about 360 BMDs, which provide transport, communications, and fire support for the troops. In late 1981 the Soviet airborne units began to receive a 120-mm "combination" gun (essentially a gun-mortar) mounted on a modified BMD chassis. As more units are equipped with these vehicles and other BMD variants, the BMD inventory in each division will reach about 420, transforming the Airborne Troops from a light infantry force to a force of light mechanized divisions.

When compared with other armored or mechanized units, however, the Soviet airborne division still has relatively little firepower or endurance. Its air defense weapons and artillery are extremely limited. Until more heavily equipped ground forces link up with it, tactical aircraft must provide the division's air cover and most of its fire support. Given suitable defensive terrain, a Soviet airborne force could be expected to put up a strong, but probably short-lived, resistance against a mechanized opponent.

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#### Helicopters

#### **Force Improvements**

Army aviation—a component of the Air Forces consisting primarily of helicopters—continues to expand, providing greater air support for ground force armies and divisions. Twelve of the 27 ground armies now have attack helicopter squadrons, and in 49 ground force divisions the helicopter detachment has been augmented with MI-8 Hip and MI-24 Hind attack helicopters to form a direct-support squadron that also has some transport capability.

MI-8. The Soviets continue to field the Hip H with their helicopter units in the USSR and Eastern Europe. This improved variant, previously used primarily in Afghanistan, has engines powerful enough to carry a heavy weapon load plus a full complement of troops. Other recent variants, the Hip J and K, have electronic countermeasure roles.

MI-24. The Soviets have added disposable fuel tanks to the MI-24 Hind helicopter for additional range and loiter time and have modified its launch rails to increase its missile load. A variant of the Hind E has a heavier twin gun (which would be effective against lightly armored vehicles and other helicopters) in addition to the standard antitank missile, with a range of 5,000 meters.

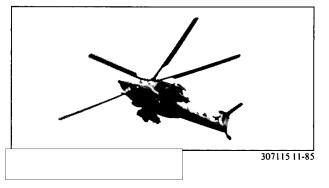
MI-26 Halo. This heavy-lift transport can carry a greater payload than any other helicopter in the world, in service or under development. It has the same capacity as the AN-12 fixed-wing transport—that is, it can carry nearly twice the payload of the MI-6 Hook that it replaces. It can carry two airborne combat vehicles and will provide heavy lift for air assault operations.

#### **Systems Under Development**

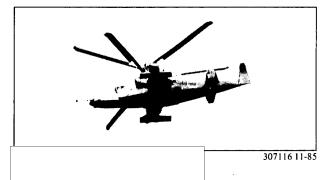
The Soviets are developing two new helicopters, the Havoc and the Hokum. Although the Havoc probably will have a primary role of ground attack, the role of the Hokum is not yet understood. Some believe it is

# End 1984 Attack MI-8 Hip MI-24 Hind Assault Transport MI-6 Hook MI-8 Hip MI-26 Halo Total

#### **Havoc A Attack Helicopter**



#### **Hokum A Attack Helicopter**



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Combat Helicopters	Operational Radius	Armament	Cruise Speed	Year Operational
MI-6 Hook	315-km with 5,500-kg payload		255 km/h	1960
P. P. P. P.	<del></del>			
MI-8 Hip E	215 km with 1,720-kg weapon load	AT-2 ATGM, rockets, bombs, Gatling gun	215 km/h	1977
	190 km with 2,400-kg payload			
MI-24 Hind E	220 km with 1,150-kg weapon load	AT-6 ATGM, rockets, bombs, cannon or Gatling gun	260 km/h	1978
MI-26 Halo	265 km with 20,000-kg payload		250 km/h	1982
	-			
Havoc (developmental)	CIA, DIA: 300 km (USAF: 275 km) with 1,850-kg payload	ASM or AAM, rockets, bombs, cannon or Gatling gun	280 km/h	1987
	CIA, DIA: 300 km	AAM or ASM or ATGM,	330 km/h	1987 (CIA 1987-88

meant primarily for air-to-air combat with a secondary mission of ground attack. Both are smaller than the MI-24 and more maneuverable. They probably are intended to augment the MI-24 rather than to replace it.

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Ground Forces	Secret

#### Introduction

The Soviets are improving their ground forces in four ways.

- They are continually providing new equipment, as modernization efforts begun in the mid-1960s have become steady and even paced.
- Mobilization bases, which were created beginning in the 1960s to stockpile older equipment for inactive divisions, are gradually being activated with enough troops to form a cadre that could expedite expansion to wartime strength and readiness. In 1984, the Soviets activated four bases.
- Since the late 1970s, a few active divisions at a time have been undergoing structural changes that make them larger, more mobile, and more flexible. Through the end of 1984, at least 36 divisions have been involved.
- The reorganization of two divisions into new-type army corps consisting of brigades probably portend future changes to provide selected fronts with one of these powerful units that is able to act as an operational maneuver group in exploiting penetrations of enemy defenses.

East European countries also are attempting to modernize their forces but are unable to keep pace with Soviet improvements and may find their wartime roles altered if Moscow attempts to compensate for its allies' shortcomings.

The Warsaw Pact ground forces are trained to withstand an enemy attack and within days to begin their own offensive operation. They are trained to penetrate and overrun the enemy's forward defenses, disrupt mobilization in rear areas, prevent reestablishment of defensive lines, and occupy enemy territory. Nuclear weapons delivered by tactical missiles and artillery would be important instruments—along with those delivered by aircraft and longer range missiles—used to destroy the enemy's nuclear systems, command and control facilities, air defenses, and major support facilities.

To perform these tasks, the USSR has two new-type army corps, 201 active divisions, 13 mobilization bases for inactive divisions, and some 32 maneuver regiments and brigades that are independent of divisions. Of these, both corps, 82 of the active divisions, and most of the independent units are regarded as ready. These are well-trained and well-equipped units with 50 to 90 percent of their wartime personnel. The remaining 132 active and inactive divisions are not ready, generally are less well equipped, and have less than 50 percent of their wartime manpower needs. The not ready force would need extensive training after mobilization, but most units could be effective in offensive combat operations within a month. The peacetime manpower of 1.9 million troops would increase to about 4 million after mobilization.

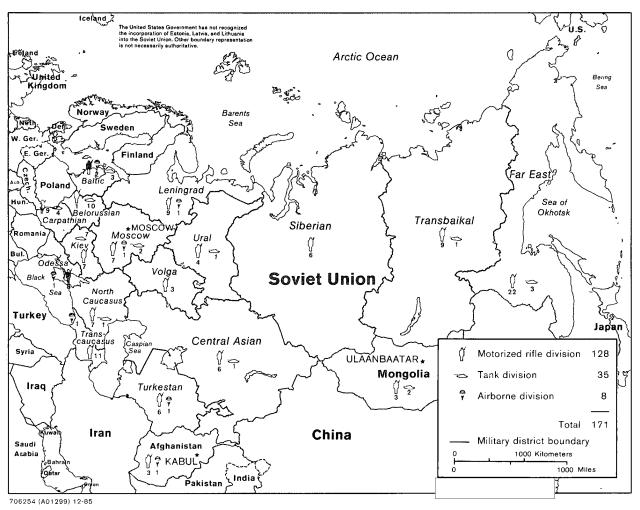
The East European members of the Warsaw Pact provide another 55 active divisions and 13 mobilization bases that vary considerably in organization and weaponry despite efforts at standardization. Their peacetime strength comes to about 900,000 men and would grow to about 1.4 million in wartime.

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#### Soviet Ground Force Divisions in the Soviet Union, Mongolia, and Afghanistan



#### The New Division and Army Corps Structures

With 328 tanks and some 11,000 men in wartime, a Soviet tank division is a formidable force. Since 1980 the most ready divisions—primarily those opposite NATO—have gradually been altered to improve their firepower, mobility, and flexibility. They now have more motorized rifle troops in the tank regiments and more artillery available to suppress antitank weapons.

Specifically, each of a tank division's three tank regiments is adding an artillery battalion and expanding its motorized rifle company to make it a battalion. The divisional artillery regiments are converting to self-propelled, rather than towed, equipment. In these divisions, the Soviets also are adding tanks to the reconnaissance battalion and creating a helicopter squadron from the existing detachment. The artillery, reconnaissance, and helicopter changes also are taking place in motorized rifle divisions.

Despite the large increase in equipment—2,000 artillery pieces for the 19 Soviet divisions in East Germany alone—peacetime manning apparently is remaining constant. As a result of the expansion, the percentage of troops on hand in relation to wartime authorized strength is decreasing.

In 1980, divisions at Kyakhta in the Transbaikal MD and at Minsk in the Belorussian MD began converting to a new-type army corps structure. These corps, each with a wartime strength of some 20,000 to 25,000 men, would be nearly twice the size of a standard motorized rifle division. Each appears to have four or five maneuver brigades that are somewhat larger than the maneuver regiments of divisions and have heavier air defenses. The brigades, in turn, consist of four or five composite battalions. These battalions make the organization unique because they mix five infantry and tank companies. An airmobile assault regiment in each corps will allow the commander to move troops with helicopters bypassing enemy strongpoints and increasing the tempo of the attack. Strong artillery and air defense will enable the army corps to operate independently beyond the range of higher echelon artillery and air defense units.

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Sanitized Copy Approved for Release 2010/07/29: CIA-RDP88T00565R000200250002-1 Secret 25X1 **Soviet Tank Division** Headquarters SS-21 Helicopter Support Reconnaissance battalion squadron battalion elements Regiments Tank Motorized rifle Artillery SAM Tank Motorized rifle Howitzer Missile battalion battalion battery Tank Multiple rocket Motorized rifle battalion launcher battalion battalion Technical battery Howitzer Targetting Howitzer battalion battery Surveillance battery Support Air defense Air defense elements battery battery Support elements Antitank Support missile battery elements Support elements 25X1 307117 11-85 25X1 Soviet Tank Division Strengths Troops 11,000 Equipment Tanks 328 APCs/ACVs 456 Field artillery 108 Mortars 40 Multiple rocket launchers 18 SS-21s 4 Helicopters 18 SAM TELs 36 25X1 29 Secret

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#### **Armor and Infantry**

Improvements to the tank force include an extensive program to modernize some older tanks in addition to continuing production of new models. The Soviets also are fielding advanced armored combat vehicles to improve protection and mobility for the infantry troops that move with advancing tank formations.

Modernizing older T-55 and T-62 tanks probably would involve equipping them with new fire-control systems and additional hull and turret armor. They also will be refitted with new engines and transmissions, and some may receive new guns. These changes probably cost one-third of the price of a new tank, making modernization particularly attractive to the East Europeans.

At least three new tank models are in production—the T-64B, a T-72 variant, and the T-80. The T-64B and T-80 can fire antitank guided missiles, as well as standard tank munitions, through their gun tubes. The T-72 variant has improved armor and a better fire-control system. Most of the new tanks are going to divisions opposite NATO. In addition, Poland and Czechoslovakia are assembling an earlier T-72 variant in small numbers as part of a consortium.

Motorized rifle units are receiving both tracked and wheeled vehicles. Units in Afghanistan and regiments in tank divisions opposite NATO are the primary recipients of a tracked infantry fighting vehicle—the BMP-2—that has a 30-mm high-velocity cannon instead of the older 73-mm gun and a newer antitank missile than the original BMP. The new cannon and additional external armor noted recently give this vehicle significant firepower and protection advantages over NATO models. It also can engage helicopters with the cannon and the missile. A lighter tracked

Tanks		
	End 1984	
T-54/55/62	29,500	
T-64/72/80	18,800	
Total	48,300	

	End 1984
BTR-60	10,220
BTR-70	6,060
BMP-1	22,660
BMP-2	950
BMD	2,530
MTLB	2,875
Total	45,295

vehicle, the BMD, is produced for airborne units, and another light tracked vehicle, the MTLB, is being delivered to units in the northwestern and far eastern USSR where it is better suited to the terrain than heavier vehicles. The wheeled BTR-70 remains in production to provide a cheaper and more reliable, though less mobile offroad, alternative to the tracked vehicles.

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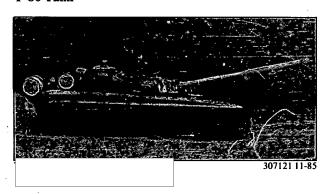
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Principal Tanks	Main Armament	Armor	Weight	Year Operationa
Г-54	100-mm gun	Homogeneous steel	36 metric tons	1949
T-55	100-mm gun	Homogeneous steel	36 metric tons	1958
T-62	115-mm smoothbore gun	Homogeneous steel	37 metric tons	1961
[-64a	125-mm smoothbore gun	Laminate	38 metric tons	1970
F-64b	125-mm smoothbore gun, antitank guided missile	Laminate	38 metric tons	1981
T-72	125-mm smoothbore gun	Laminate	41 metric tons	1974
F-80	125-mm smoothbore gun, antitank guided missile	Laminate	Over 40 metric tons	1983

#### T-80 Tank



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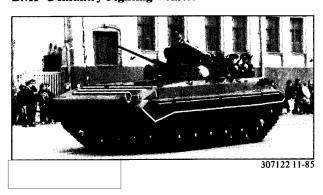
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Armored Combat Vehicles	Main Armament	Speed		Capacity	Year	
Aimorca Combat Venicies		Land	Water		Operational	
BTR-60PB	14.5-mm and 7.62-mm machineguns	80 km/h	10 km/h	3 crewmen, 8 troops	1961	
ВМР	73-mm gun, 7.62-mm machinegun, Sagger antitank missile (new models have 30-mm gun)	65 km/h	6 km/h	3 crewmen, 8 troops	1967	
BMD (with airborne units)	73-mm gun, 7.62-mm machineguns, Sagger ATGM	80 km/h	10 km/h	3 crewmen, 6 troops	1970	
BTR-70	14.5-mm and 7.62-mm machineguns	More than 80 km/h	?	3 crewmen, 8 troops	1978	
BMD M-1979 (with airborne units)	7.62-mm machineguns, Sagger ATGM	80km/h	10 km/h	3 crewmen, 6 troops	1979	

#### **BMP-2 Infantry Fighting Vehicle**



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#### Artillery

Modernization and expansion of artillery assets has been a continuing task for the Soviets since the mid-1970s. Soviet efforts are aimed at achieving a high density of fire and improving mobility, particularly for the artillery components of tank and motorized rifle divisions. A wide variety of weapons, some of which have been in production more than 10 years, are being provided to fill needs at various command levels. The proliferation of 152-mm weapons provides nuclear-capable artillery down to the division level.

Army- and front-level artillery units are still receiving the BM-27 multiple rocket launcher (MRL) first fielded in 1977. They also are being supplied with a 152-mm towed gun and the 2S5, a self-propelled 152-mm gun. The heavy artillery brigades assigned to fronts are slowly replacing old towed weapons with self-propelled 203-mm guns and 240-mm mortars.

Most divisional artillery regiments have received the BM-21 MRL that dates from the mid-1960s, and many are converting from an older towed system to the self-propelled 2S3, a 152-mm gun howitzer. At the regimental level, the Soviets are fielding the Grad-1 MRL and are continuing to form 122-mm howitzer battalions. Many have received the towed D-30 howitzer, but some tank and motorized rifle regiments are being equipped with the self-propelled 2S1.

The number of weapons is increasing at all levels. Some artillery battalions at army and front level have expanded from 18 to 24 weapons. In addition to forming battalions in the maneuver regiments of most divisions, the Soviets also are establishing artillery brigades for some armies and are expanding the number of artillery divisions and heavy artillery brigades at the front level.

Artillery	
	End 1984
Self-propelled artillery	
2S1 122-mm M-1974	1,900
2S3 152-mm M-1973	1,750
2S4 240-mm M-1975	190
2S5 152-mm M-1981	240
2S7 203-mm M-1975	180
Subtotal	4,260
Towed artillery	
152-mm	7,460
122-mm	13,350
203-mm	170
Subtotal	20,980
Multiple rocket launchers	
BM-21	4,520
Grad-1	180
BM-27	720
Airborne MRL	90
Subtotal	5,510

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Self-Propelled Artillery	Main Armament	Maximum Range	Year Operational
S3 4-1973	152-mm gun- howitzer	17.3 km	1973
S1 1-1974	122-mm howitzer	15.3 km	1974
S7 1-1975	203-mm gun	24-30 km	1977
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<b>64</b> I-1975	240-mm mortar	9.7 km	1977
S5 1-1981	152-mm gun	21-28.5 km	1980
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Multiple Rocket Launchers	Main Armament	Maximum Range	Year Operational
BM-21 M-1964	40 122-mm rockets	20.5 km	1964
M-1975 with airborne units)	12 122-mm rockets	20.5 km	1975
BM-27 M-1977	16 220-mm rockets	50 km	1977
0000			
GRAD-1 1-1978	36 122-mm rockets	20.5 km	1977
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Force Improvements  SAM Launchers  The Soviets continue to stress the coordination of aircraft and ground-based systems in air defense operations. Units at the division level and below are receiving more advanced surface-to-air missile systems, and improved radars are increasing the effectiveness of each firing unit. A new SAM system is nearly ready for army- and front-level units, and several other air defense development programs are coming to fruition.  SA-8  SA-9  SA-9  SAM Launchers  End 1984  Launchers  SA-2  160  SA-2  150  SA-3  150  SA-4  1,350  12  SA-6  850  SA-8  700  25X1	Sanitized Copy Approved for Release 2010/0	7/29 : CIA-RDP88T00		
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SA-6b launchers. The launcher has its own radar, and each unit is receiving enough of them to double its target-handling capacity. The latest SA-6 missile has improved capabilities against helicopters and against targets using electronic countermeasures.  SA-11. This SAM system has greater range than the SA-6 and SA-8 and can engage targets at higher altitudes. With its own radar, each launcher can operate independently after target acquisition data has been identified at front- and army-level SA-4 garrisons in the western USSR.  SA-13. This tracked launcher continues to replace the wheeled SA-9; it can accommodate either missile. Sa-13 this tracked launcher continues to replace the wheeled SA-9; it can accommodate either missile. SA-13 this tracked launcher continues to replace the wheeled SA-9; it can accommodate either missile. SA-X-12. This advanced tactical SAM system has two different missiles, each with its own launcher and radar. The SA-X-12 can engage multiple targets of various types simultaneously. Its Gladiator missile can engage high-performance aircraft and short-range ballistic missiles such as the US Lance, and its Giant missile appears to be able to intercept tactical		SA-9	570	,
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target-handling capacity. The latest SA-6 missile has improved capabilities against helicopters and against targets using electronic countermeasures.  SA-11. This SAM system has greater range than the SA-6 and SA-8 and can engage targets at higher altitudes. With its own radar, each launcher can operate independently after target acquisition data has been provided. The SA-11 has been fielded with the new-type army corps in the Belorussian MD and has been identified at front- and army-level SA-4 garrisons in the western USSR.  SA-3. This tracked launcher continues to replace the wheeled SA-9; it can accommodate either missile. Each maneuver regiment in the ready Soviet divisions (about 40 percent of active divisions) has an air defense battery consisting of four SA-9 or SA-13 launch vehicles and four ZSU-23/4 antiaircraft guns.  Total  Shoulder fired  SA-7 or SA-14  18,500  Note: Although these SAMs are primarily intended to protect theater forces, some of them could be used to augment the SAMs dedicated to territorial air defense. The SA-2s in this table are in antiaircraft divisions in the USSR; the SA-3s protect Soviet airbases in Easter Europe. One SA-5 complex is subordinate to Soviet forces in East Germany.  25X1  SA-X-12. This advanced tactical SAM system has two different missiles, each with its own launcher and radar. The SA-X-12 can engage multiple targets of various types simultaneously. Its Gladiator missile can engage high-performance aircraft and short-range ballistic missiles such as the US Lance, and its Giant missile appears to be able to intercept tactical	SA-6b launchers. The launcher has its own radar, and	SA-13	680	
shoulder fired  SA-7 or SA-14  SA-18 or SA-18 or SA-3 in the USSR; the SA-3s protect Soviet airbases in Eastern Europe. One SA-5 complex is subordinate to Soviet forces in East Germany.  Soviet forces in East Germany.  Systems Under Development  SA-3 or SA-14  SA-18 or SA-14  SA-18 or SA-13 in the USSR; the SA-3s protect Soviet airbases in Eastern Europe. One SA-5 complex is subordinate to Soviet forces in East Germany.  Systems Under Development  SA-3 or SA-14  SA-18 or SA-18 or SA-13 in this table are in antiaircraft divisions in the USSR; the SA-3s protect Soviet airbases in Eastern Europe. One SA-5 complex is subordinate to Soviet forces in East Germany.  Systems Under Development  SA-3 or SA-14  SA-2s in this table are in antiaircraft divisions in the USSR; the SA-3s protect Soviet airbases in Eastern Europe. One SA-5 complex is subordinate to Soviet forces in East Germany.  Systems Under Development  SA-X-12. This advanced tactical SAM system has two different missiles, each with its own launcher and radar. The SA-X-12 can engage multiple targets of various types simultaneously. Its Gladiator missile can engage high-performance aircraft and short-range ballistic missiles such as the US Lance, and its Giant missile appears to be able to intercept tactical		Total	4,528	
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SA-11. This SAM system has greater range than the SA-6 and SA-8 and can engage targets at higher altitudes. With its own radar, each launcher can operate independently after target acquisition data has been provided. The SA-11 has been fielded with the new-type army corps in the Belorussian MD and has been identified at front- and army-level SA-4 garrisons in the western USSR.  SA-13. This tracked launcher continues to replace the wheeled SA-9; it can accommodate either missile.  Each maneuver regiment in the ready Soviet divisions (about 40 percent of active divisions) has an air defense battery consisting of four SA-9 or SA-13 launch vehicles and four ZSU-23/4 antiaircraft guns.  antiaircraft divisions in the USSR; the SA-3s protect Soviet airbases in Eastern Europe. One SA-5 complex is subordinate to Soviet forces in East Germany.  25X1  SA-X-12. This advanced tactical SAM system has two different missiles, each with its own launcher and radar. The SA-X-12 can engage multiple targets of various types simultaneously. Its Gladiator missile can engage high-performance aircraft and short-range ballistic missiles such as the US Lance, and its Giant missile appears to be able to intercept tactical			. <del></del>	20/1
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launch vehicles and four ZSU-23/4 antiaircraft guns. Giant missile appears to be able to intercept tactical	•			
				25 <b>X</b> 1

Pershing II. The SA-X-12 probably will become operational in 1985 and may begin replacing SA-4s in front- and army-level SAM brigades in the next year or so.

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SA-14. This improved man-portable SAM is replac-

ing the SA-7 in ground force battalions and compa-

nies. The older SA-7 is effective only when fired at

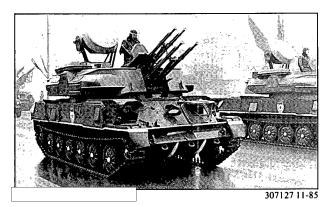
the rear of a target, but the SA-14 can intercept a

target nearly head on.

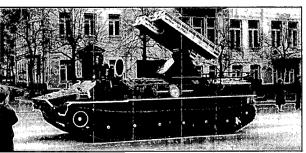
	Range		Altitude		Guidance	Rails per	Year
Mobile SAMS	Minimum	Maximum	Minimum	Maximum		Launcher	Operational
SA-4 Ganef	10 km	50 km, CIA 100 km, DIA	100 m	25,000 m	Semiactive radar	2	1967
A-6		24 les	Z50	15 000	Samila saina	2	1070
A-6 ainful	4 km	24 km	<50 m	15,000 m	Semiactive radar	3	1970
GA-7 Grail	1.5 km	5 km	15 m	2,300 m	Infrared seeker	1	1967
5A-14 <b>[</b>	0.6 km	5 km	10 m	4,000 m	Infrared seeker	1	1978
A-8 Decko	2 km	13 km	<50 m	10,000 m 5,000 m (CIA) 10,000 m (DIA)	Semiactive radar	4 or 6	1974
A-9 iaskin	1.5 km	6.5 km	<50 m	4,500 m	Infrared seeker	4	1968
A-11	2 km	30 km	<50	20,000	Semiactive radar	4	1983
A-13	l km	6 km	<50 m	6,500 m	Infrared seeker	4	1977
	10 km	100 km	<50 m	30,000 m	Track via	4	1985

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#### ZSU-23-4 Antiaircraft Gun



SA-13 Surface-to-Air Missile System



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SA-X-15. This new mobile system probably will be fielded with divisional SAM regiments beginning in 1986 to replace the SA-8.

New Antiaircraft Gun. An improved self-propelled antiaircraft system with twin 30-mm guns and an advanced fire-control system probably will be fielded soon. It is likely to have a much greater range than the ZSU-23/4 and be more effective against helicopters and cruise missiles.

Laser Weapons. A mobile laser weapon with potential air defense applications could be operational by the late 1980s. Its most likely targets would be sensitive electro-optical sensors on helicopters and tanks.

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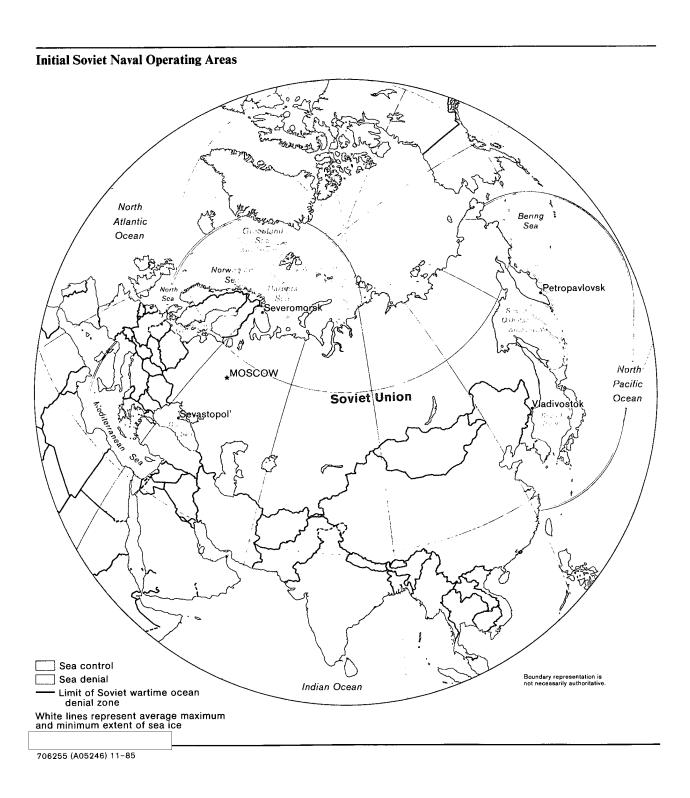
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Introduction	
Having established a worldwide presence, the Navy now is working to incorporate larger and more advanced ships and submarines with more sophisticated weapons. Soviet naval shipyards, although working at less than full capacity, are producing the larger and more complicated ships at a pace that to date has nearly offset retirements. Thus, while the fleets are remaining stable or declining slightly in numbers of ships, their capabilities are continually improving.	
serving diverse ocean areas. Where the Soviet presence in an ocean area has become continuous and sizable—as in the Mediterranean Sea, the Indian Ocean, and probably in the South China Sea—squadron commands have been established to provide local direction, particularly for logistic operations. By sending their naval ships to call at foreign ports, especially in Third World countries, the Soviets also are able to create visual impressions of their military power and of their support for client states that are difficult to achieve otherwise. In selected locations, the Soviets have access to support and repair facilities that aid in maintaining ships long distances away from home ports. Even at such foreign facilities, however, they rely on afloat logistics and repair support. During crises, Moscow often augments its naval forces in the general area of the trouble, while avoiding endangering ships in locations close to potential belligerent activity. In a number of cases, the increase in Soviet naval activity has come after the period of greatest tension.	Besides its strategic mission, the Soviet Navy's development over the last two decades has focused on two capabilities: antisubmarine warfare and antiship operations against aircraft carriers. Most Soviet ships and submarines have been devoted to one or the other of these purposes.  Soviet task groups remain vulnerable to air attack away from the protection of land-based aircraft, but improved air defense systems on new ships and the delivery of new, more capable aircraft carriers during the 1990s will help. The Naval Infantry is growing modestly, but it still would have poor prospects operating independently in combat against substantial opposition. To transport the Naval Infantry and supporting ground forces, the Navy is expected to use the USSR's growing fleet of specialized merchant ships in addition to its own amphibious assault ships.

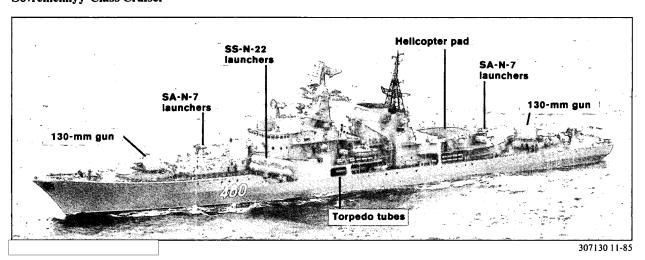
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# Sovremennyy-Class Cruiser



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# **Surface Ships**

# **Force Improvements**

During 1984, one cruiser, one destroyer, and a frigate started sea trials. Work began on six more combatants—one cruiser, two destroyers, one frigate, and two amphibious landing ships. Keeping a generally steady pace, the Soviets had 18 major ships under construction at year's end.

Aircraft Carriers. The third Kiev-class ship, the Novorossiysk, joined the Minsk in the Pacific Fleet in February 1984. The first unit, the Kiev, completed a two-year overhaul and returned to duty with the Northern Fleet in 1985. A fourth ship could begin sea trials in 1985. Its armament will differ from the earlier ships, and it will have a more sophisticated air defense radar system.

These ships carry helicopters and the YAK-38 Forger fighter that takes off from a short surface and lands vertically. The Forger would have limited prospects for success against advanced Western fighters, but it might be used successfully to support operations in some Third World areas. Using the Kiev in a Baltic Sea exercise in 1981, the Soviets were only modestly successful in testing the utility of this class and its aircraft in supporting an amphibious landing. The Soviets may be planning to add a ski jump ramp to some of these ships, which would allow a modified Forger or an improved STOL aircraft to take off.

Cruisers. The second Kirov-class nuclear-powered cruiser, the Frunze, was delivered to the Navy and probably will be assigned to the Pacific Fleet. Construction of a third ship is continuing in Leningrad.

Two Slava-class guided-missile cruisers are fitting out at a Nikolayev shipyard; one additional hull of this type may be under construction. The first unit of this class became operational in 1983. Based in the Black Sea, it can deploy easily to the Mediterranean.

Surface	Ships

	End 1984
urface combatant classes	
Aircraft carriers	
Kiev	3
Cruisers	
Sverdlov	8
Kynda	4
Kresta-I	4
Kresta-II	10
Moskva	2
Kara	7
Kirov	2
Slava	1
Destroyers	
Skoryy and Mod Skoryy	8
Kotlin and Mod Kotlin	13
Kildin and Mod Kildin	4
Kashin and Mod Kashin	18
Kanin	6
Sovremennyy	4
Udaloy	5
Frigates	
Riga	33
Grisha I/II/III/IV	60
Krivak I/II/III	34
Koni	1
Mirka	15
Petya	35
Total	277
Amphibious warfare classes	
Alligator	14
MP-4	2
Polnocny	43
Ropucha	17
Ivan Rogov	2
Total	78

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Armament	Propulsion	Full Load Displacement	Year Operationa
SA-N-4, SS-N-14 ASW missile, 76-mm or 100-mm guns, torpedoes	Gas turbine	3,800 metric tons	1970
SA-N-3, SA-N-4, SA-N-6 (on one ship), SS-N-14, 76-mm guns, torpedoes	Gas turbine	9,700 metric tons	1972
20-36 ASW helicopters and V/STOL fighters, SA-N-3, SA-N-4, SS-N-12 antiship cruise missile, SUW-N-1 ASW rocket, 76-mm guns, torpedoes	Steam turbine	37,000 metric tons	1976
SA-N-4, 76-mm guns, battalion landing team, air-cushion vehicles, landing craft	Gas turbine	13,100 metric tons	1978
SA-N-4, SA-N-6, SS-N-14 (on one ship), SS-N-19 antiship cruise missile, 100-mm or 130-mm guns, torpedoes	Combined nuclear and steam	28,000 metric tons	1980
SA-N-9, SS-N-14, 100-mm guns, torpedoes	Gas turbine	8,000 metric tons	1981
SA-N-7, SS-N-22 antiship cruise missile, 130-mm guns, torpedoes	Steam turbine	7,300 metric tons	1981
SA-N-4, SA-N-6, SS-N-12, 130-mm guns,	Gas turbine	12,000 metric tons	1982
	SA-N-4, SS-N-14 ASW missile, 76-mm or 100-mm guns, torpedoes  SA-N-3, SA-N-4, SA-N-6 (on one ship), SS-N-14, 76-mm guns, torpedoes  20-36 ASW helicopters and V/STOL fighters, SA-N-3, SA-N-4, SS-N-12 antiship cruise missile, SUW-N-1 ASW rocket, 76-mm guns, torpedoes  SA-N-4, 76-mm guns, battalion landing team, air-cushion vehicles, landing craft  SA-N-6, SS-N-14 (on one ship), SS-N-19 antiship cruise missile, 100-mm or 130-mm guns, torpedoes  SA-N-9, SS-N-14, 100-mm guns, torpedoes  SA-N-7, SS-N-22 antiship cruise missile, 130-mm guns, torpedoes  SA-N-7, SS-N-22 antiship cruise missile, 130-mm guns, torpedoes	SA-N-4, SS-N-14 ASW missile, 76-mm or 100-mm guns, torpedoes  SA-N-3, SA-N-4, SA-N-6 (on one ship), SS-N-14, 76-mm guns, torpedoes  SA-N-3, SA-N-4, SS-N-12 antiship cruise missile, SUW-N-1 ASW rocket, 76-mm guns, torpedoes  SA-N-4, 76-mm guns, battalion landing team, air-cushion vehicles, landing craft  SA-N-4, SS-N-14 (on one ship), SS-N-19 antiship cruise missile, 100-mm or 130-mm guns, torpedoes  SA-N-9, SS-N-14, 100-mm guns, torpedoes  SA-N-7, SS-N-12 antiship cruise missile, 130-mm guns, torpedoes  SA-N-9, SS-N-14, 100-mm guns, torpedoes  SA-N-7, SS-N-12 antiship cruise missile, 130-mm guns, torpedoes  SA-N-7, SS-N-14, Gas turbine  Gas turbine	SA-N-4, SS-N-14 ASW missile, 76-mm or 100-mm guns, torpedoes  SA-N-3, SA-N-4, SA-N-6, SS-N-12 antiship cruise missile, 100-mm guns, torpedoes  SA-N-4, SA-N-6, SS-N-14 (on one ship), SS-N-19 antiship cruise missile, 100-mm or 130-mm guns, torpedoes  SA-N-9, SS-N-14, 100-mm guns, torpedoes  SA-N-9, SS-N-14, 100-mm guns, torpedoes  SA-N-9, SS-N-14, 100-mm guns, torpedoes  SA-N-7, SS-N-14, 100-mm guns, torpedoes

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Destroyers. The Sovremennyy and Udaloy classes are in series production, and hulls now under construction will bring each class to about 10 ships. Both classes probably will remain in production for several more years.			25 <b>X</b> 1
Amphibious Assault Ships. Two units of the Ivan Rogov class have been built, and, although their size			25X1
and capabilities offer significant advantages for power projection, no more of these ships are under construction.			25X1
Systems Under Development			
Aircraft Carrier. A new large aircraft carrier probably will be launched by the end of 1985 and could be operational by about 1990. The configuration of its flight deck and propulsion plant is not yet clear. There is uncertainty about whether it will be able to handle conventional takeoff and landing aircraft.	7		0574
			25 <b>X</b> 1
Wing-in-Ground Craft. Since the 1960s the Soviets have been experimenting with craft that fly just above the water surface. Three wing-in-ground craft are being tested for various missions including carrying antiship cruise missiles.			25X1
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#### **Attack Submarines**

# Force Improvements

The Soviets have launched seven diesel-powered K-class submarines and have expanded production to a second shipyard. They could have 20 operational by 1990 and could export additional units to other Warsaw Pact or Third World countries. This class may be equipped with a short-range surface-to-air missile system.

Production of the nuclear-powered V-III ended in 1984, with launches at Komsomol'sk and Leningrad bringing the total to 20. About two-thirds of the 66 Soviet SSNs belong to the V-class series, produced since 1968.

The first two O-class nuclear-powered cruise missile submarines are now operational. Each unit carries 24 SS-N-19 antiship cruise missiles (the older E-IIs that make up 60 percent of the SSGN force carry eight SS-N-3s or SS-N-12s each).

#### **Systems Under Development**

Several Y- and H-class SSBNs dismantled under SALT rules are being rebuilt for special purposes, and three new SSN classes are entering or about to enter service. These new SSNs probably will be less noisy than the V-III (currently the quietest operational Soviet SSN) and will be more difficult targets for Western ASW forces.

SSBN Conversions. One converted Y-I-class hull, relaunched in October 1982, has a new midsection that houses 12 launchers, probably for the SS-NX-24 long-range supersonic cruise missile (see page 6). A second Y-I, relaunched in July 1983, has been converted to a torpedo-attack submarine and probably can carry the SS-NX-21. Two more Y-Is and two H-IIs, now undergoing conversions, probably will be relaunched in 1985 as SSNs, although other configurations, such as command and control or cruise missile test platforms, also are possible.

Attack Submarines	
	End 1984
Torpedo attack	
Diesel	
W-class	51
Z-class	1
F-class	53
R-class	4
T-class	20
K-class	8
Nuclear	
N-class	12
E-class	5
V-I-class	16
V-II-class	7
V-III-class	20
A-class	6
M-class	1
S-class	1 447 17
Y-class	1
Cruise missile	
Diesel	
J-class	16
Nuclear	
E-II-class	27
C-I-class	11
C-II-class	. 6
P-class	1
O-class	2
Y-class	1
Total	270

Note: These figures include submarines in repair and on sea trials but exclude auxiliary, radar picket, coastal, training, and reserve units. They also exclude dismantled Y-class SSBNs that have not been converted to other roles.

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Newer Attack Submarines	Armament	Propulsion	Surfaced Displacement	Year Operational
V-III Class SSN	Torpedoes, SS-N-16 ASW missile	Nuclear	4,700 metric tons	1978
A Class SSN	Torpedoes, SS-N-15 ASW missile	Nuclear	2,700 metric tons	1978
O Class SSGN	Torpedoes, SS-N-19 antiship cruise missile	Nuclear	10,000 metric tons	1981
K class SS	Torpedoes	Diesel	2,500 metric tons	1981
9-11-1				
M Class SSN	Torpedoes, SS-NX-21 cruise missile, ASW missile	Nuclear	11,000 metric tons	1984
S Class SSN	Torpedoes, possible antiship cruise missile, ASW missile	Nuclear	5,000 metric tons	1984
P. A. MALLAN				
Akula Class SSN	Torpedoes, possible antiship cruise missile, ASW missile	Nuclear	5,000 metric tons	1985
				307132 11

New Submarines. The first M-class unit was launched at Severodvinsk in June 1983 and probably will be operational in 1985. The first S-class submarine became operational in October 1984. Production could be one to three per year. Yet a third new type of SSN, the Akula, is undergoing sea trials.

A small nuclear-powered submarine, the X-class, was launched in October 1983. The U-class submarine launched in late 1982 has been assigned to an operational base. Both probably are designed for special purpose or research applications

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#### The ASW Search Problem

The Soviet Navy would conduct antisubmarine warfare operations to protect its own SSBNs, attack western SSBNs, protect its own surface ships, and defend coastal areas. Its effectiveness in these roles, however, is severely limited, especially in the initial phase of a typical ASW operation—searching a large ocean area. The Soviets lack an effective broad-area search capability, which severely limits their prospects for success in the remainder of the ASW operation. The subsequent phases—localization and attack—would be likely to occur only as the result of chance encounters with submarines or in cases where a submarine had revealed its presence by launching missiles, attacking or approaching Soviet units, or passing acoustic sensors in coastal waters near the USSR.

The Soviets' fixed and moored acoustic sensors have short detection ranges that limit them to guarding naval bases and waters close to the USSR.

Recognition of these limitations probably has led the Soviets to explore alternate means for developing a long-range ASW surveillance capability, such as towed passive acoustic arrays. The Soviets have been developing such arrays since at least 1970, but they apparently have encountered difficulties in this program. When these devices are proved and installed in significant numbers of the quieter new submarines, the Soviets will be able to concentrate enough sensors to significantly improve their ability to search more extensive areas. Within the last few years, the Soviets have enhanced their local-area search capabilities by introducing improved sonars and signal-processing equipment for the Kirov-class cruisers, Udaloy-class destroyers, and several new submarine classes and by providing new sonobuoys for Bear F ASW aircraft.

At present, active sonars do not offer a good alternative to low-frequency passive sonars in broad-area search or surveillance. The noise generated by the search forces and their active sonars would alert Western submarines at a distance much greater than the maximum detection range for Soviet active sonars and would allow the submarines ample time to evade detection.

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Weapon Systems			
Force Improvements	Weapon Systems		
SAMs. Three of the newest classes of major surface		End 1984	
combatants are being built with launchers for new	A (1.1.1		
urface-to-air missiles. The Kirov- and Slava-class	Antiship missile launcher	S	
ruisers carry the high-speed, vertically launched SA-	SS-N-2	264	
N-6 that is the Navy's version of the SA-10. The SA-	SS-N-3 SS-N-7	88	
N-6 probably is intended for use against multiple	SS-N-9	00	
ircraft at medium-to-high altitudes at a range as	SS-N-12	112	
reat as 85 km—and it may have a maximum range of 100 km—although the operational performance of	SS-N-19	88	
he system to date has fallen well below these esti-	SS-N-22	36	
nates. Sovremennyy-class destroyers have two	Surface-to-air missile lau		
nanchers for the SA-N-7 and can either engage two	SA-N-1	122	
argets simultaneously or fire two missiles at the same	SA-N-3	86	
arget to ensure a high probability of kill. Each	SA-N-4	218	
auncher's magazine probably can hold 22 missiles.	SA-N-6	38	
The low-to-medium-altitude SA-N-7 has an effective	SA-N-7	9	
ange of about 32 km; its ground-based counterpart is	SA-N-9	71	
he SA-11 (see page 39).			:
Antiship Missiles. Two new antiship missiles have entered service in recent years. The SS-N-19 is deployed on O-class submarines (with 24 launchers each) and on Kirov-class cruisers (each with 20 aunchers). The SS-N-22—a high-speed, low-altitude entiship cruise missile—is being deployed on Sovremennyy-class destroyers, which have eight launchers	oped for use on the sincluding the Typhobe a version of an ex	ir missile evidently is being devel- surface by some submarines, on-class SSBN. It probably will isting short-range SAM, such as al version of the SA-7).	:
or it.	Long-Range Cruise 1	Missiles. The SS-NX-21 (similar	
		ersion of the US Tomahawk) has	
Torpedoes. The Soviets now have a high-speed and	been test-fired from	a modified V-III-class SSN. The	
high-endurance torpedo that can home in on a ship's	SS-NX-24 (a high-a	ltitude, supersonic missile	
vake. This torpedo, which because of its large diame-		was	
er can be carried only by their newer submarine lasses, can attack surface ships, including aircraft arriers, from as much as 10 km astern. Another arge-diameter, high-endurance torpedo can be used		modified Y-I-class submarine.  nissiles are discussed on page 6.)	
n either antisubmarine or antiship attacks, improving	New Antiship Missil	es.	
dexibility in the weapons load of a submarine.	a modified SS-N-12	The	
		e probably is comparable to that	

# **Systems Under Development**

New SAMs. The Soviets are developing a new vertically launched surface-to-air missile, the SA-NX-9. Several modern surface combatants are already fitted with launch positions for this short-range (20 km) follow-on to the SA-N-4.

missile's design range probably is comparable to that of the SS-N-12—about 550 km—but it probably will have improved guidance and propulsion systems. Launchers on E-II-class cruise missile attack submarines, the Kiev-class aircraft carriers, and the Slavaclass guided-missile cruisers could carry this missile

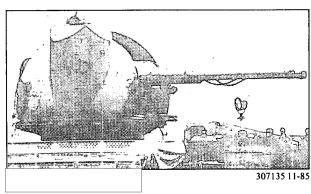
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when it becomes operational in 1985 or 1986.

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Antiship I	Missiles				Antisubm	narine Missile	es		
	Principal Platforms	Maximum Range	Guidance	Year Operational		Principal Platforms	Maximum Range	Guidance	Year Operational
SS-N-2 b/c	Patrol boats, Kildin DDG, Kashin DDG	40/95 km	Radar or infrared	1964/74	SUW-N-1	Moskva CHG, Kiev CVG	30 km	Unguided ballistic	1968
SS-N-3 a/c	W SSG, J SSG,	410/ 830 km	Radar/auto pilot and	1962	SS-N-14	Krivak FFG, Kresta-II CG,	55 km	Radar and acoustic	1972
~ F	Ę-II SSGN		inertial			Kara CG, Kirov CGN			
					No drawing	available			
SS-N-3b Mod 1/2	Kynda CG, Kresta-1 CG <sup>a</sup>	300 km	Radar	1962/76	SS-N-15	A SSN,	35 km	Inertial	1973
SS-N-7	C-I/II SSGN	80 km	Radar	1968		V-I/II SSN			
					Ē				
SS-N-9	Patrol boats, C-II SSGN, P SSGN	115 km	Radar and infrared	1971	SS-N-16	V-II/III SSN, possibly A SSN	90 km	Inertial and acoustic	1983
SS-N-12	Kiev CVG, Slava CG, E-II SSGN	550 km	Radar	1976					307134 11-8:
	E N SSON				130-mm	Naval Gun			
2					9		·		
SS-N-19	Kirov CGN, O SSGN	550 km	Radar	1981					4.0
No drawing a	available						1 - 5		
SS-N-22	Sovremennyy DDG	125 km	Radar	1982					/  }.#\$\
No drawing a	available 3b also is used wi	th land-based					-ra-	Vie.	7
launchers for	coastal defense.			207122 11 05					307135 11-8:
				307133 11-85			_		



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**Regional Developments** 

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# **Northern Europe**

#### **Ground Forces**

Soviet forces opposite Finland, Sweden, and Norway would constitute a northwestern theater of military operations (TMO) in wartime, but they are much smaller and less prepared than Soviet forces in other TMOs. In contrast to the other regions, there are no signs that a High Command would be formed for this area. The principal objective of forces in this area would be to protect the strategic bases on the Kola Peninsula. Part of this effort would involve denying NATO the use of ports and airfields in northern Norway. The Soviets can attack these bases either by moving west along the coast or by traversing Finland and approaching the bases from inland. Amphibious and airborne landings are most likely to precede attacks by ground forces.

Soviet forces in the northwest are tailored to the area's geography. The eight motorized rifle divisions feature a unique organization distinguishing them from such divisions elsewhere. Most have the PT-76 light amphibious tank, which is well suited for the marshes in the area, and personnel carriers, such as the MTLB or the GT-T, which were designed for Arctic operations. There are no tank divisions in this area. One airborne division and a naval infantry brigade provide a highly mobile force for early strikes along the Norwegian coast. Another naval infantry unit, possibly a second brigade, began forming near Murmansk in 1984. The Soviets, however, do not have enough amphibious ships to move the existing brigade at once and would have to use merchant ships to help lift the force. They may plan to use some of the six new large roll-on/roll-off ships that now operate from this area.

Normally, improvements to forces in this area come slowly and lag behind other areas. For example, the region has just begun to receive self-propelled artillery. The requirement for mobility, however, may increase the priority for expanding the number of helicopters assigned to the divisions.

, and the second	
Active divisions	10
Tank	0
Motorized rifle	9

**Ground Force Strengths for Northern Europe** 

1
2
1,200
1,400
3,100

#### Combat Aircraft in Northern Europe Fighter-interceptor SU-15 Flagon 30 MIG-23 Flogger 40 Ground attack SU-17 Fitter 45 MIG-21 Fishbed 45 MIG-27 Flogger 45 Reconnaissance or electronic warfare MIG-25 Foxbat 12 SU-17 Fitter 17 Total 234

Attack	
MI-8 Hip	0
MI-24 Hind	12
Assault transport	
MI-6 Hook	24
MI-8 Hip	57
[otal	93

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# **Naval Forces**

Elements of the Soviet Northern Fleet would support operations in the Northwestern TMO. The fleet would provide some ships and other forces for defending the coast and supporting amphibious landings. In certain areas, air defense operations would be coordinated between the fleet and land-based air and surface-to-air missile units

Surface combatants		
Aircraft carriers	0	
Cruisers	12	
Destroyers	17	
Frigates	47	
Subtotal	76	
Amphibious ships	13	
Attack submarines	125	

# **Amphibious Forces**

The Soviet Naval Infantry, an elite force that had been disbanded after World War II and re-created in the early 1960s, has been expanded and modernized since 1980, with its wartime strength growing from 14,000 to about 20,000 troops. Since 1980 the Soviets have sought to redress problems concerning organic fire support, tactics, and training. The Northern, Baltic, and Black Sea Fleets each then had one regiment of about 2,000 troops. These units have grown to become brigades that would have over 3,000 troops in wartime. A second Northern Fleet brigade apparently is being formed. The Pacific Fleet has a division with a wartime strength of about 11,000 troops.

In forming the new brigades, the Soviets have added a fourth naval infantry battalion and an antitank battalion. They also have doubled the number of PT-76 light tanks and T-54/55 medium tanks and are doubling the number of BM-21 multiple rocket launchers. The new structure also adds a battalion of 18 122-mm self-propelled guns. The additional rocket launchers and guns significantly improve the fire support available to a landing force.

The naval infantry is expected to secure harbors and airfields near the coast and to spearhead large amphibious assaults that would include ground force units. Probable areas for landings would include northern Norway, the Danish and West German coasts, and the Turkish straits. Some landings would involve simultaneous airborne assaults.

the naval infantry cannot make a large-scale landing far from the USSR. Company- to battalion-sized contingents of troops sometimes are embarked on ships deployed to the Mediterranean Sea, the Indian Ocean, and off West Africa, but they could only help protect facilities, such as an embassy or communications site, or evacuate Soviet personnel in a local crisis. Small units provide security for the Soviet facilities at Dahlak Island, Ethiopia, and Cam Ranh Bay, Vietnam

In recent years the Navy has developed more sophisticated tactics to gain the initiative at the beachhead and build up forces ashore, but it still neglects practice in moving beyond the beach. The naval infantry also is limited by an inadequate number of assault landing ships that would force it to mobilize merchant ships, particularly the growing roll-on/roll-off fleet. The lack of air support beyond the range of aircraft based in the USSR, however, is the major restriction on the naval infantry's usefulness in Third World areas.

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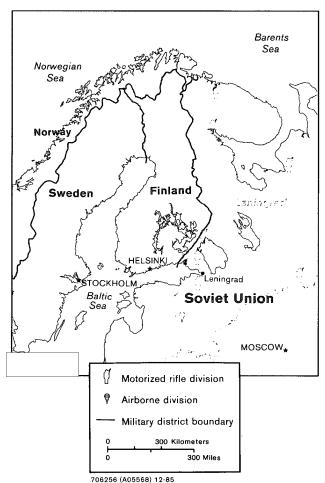
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# **Soviet Ground Forces in Northern Europe**



# Illustrative Soviet Ground Force Campaign in Northern Europe



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Central Europe	

# **Ground and Air Forces**

The Soviets are reexamining their concepts for war in Central Europe, spurred by concern over the lagging modernization of their allies' forces and improvements in NATO forces. To strengthen their capabilities at the beginning of a campaign against NATO forces, they are believed to be considering the deployment of forces from the western USSR to Central Europe before the start of hostilities. A logistic structure that could support these forces has been established in East Germany. The Soviets also are expected to convert a division there into an new-type army corps to serve as a front-level operational maneuver group.

Soviet efforts to increase combat power for breaking through NATO defenses and maintaining a rapid advance should, however, result in additional warning for NATO. The expansion of Soviet combat units in Central Europe during the past several years was carried out without substantially increasing their peacetime personnel strengths. Thus, the Soviets would need more time to fill out these units—as well as to bring forces forward from the USSR—before they would be fully capable of offensive operations.

The Soviets have been taking steps to improve their tactical nuclear delivery capabilities in Central Europe. They based SS-12 Mod 2 Scaleboard missiles there for the first time, portraying them as a counter to NATO's Pershing IIs. Two Scaleboard brigades are in East Germany, one is in Czechoslovakia, and a fourth brigade may arrive in Central Europe soon. These missiles could reach targets as distant as southern England within nine minutes, and some of them apparently are to be kept on alert. These missiles increase the Soviets' ability to preempt NATO's Pershing II and ground-launched cruise missiles.

Soviet forces in Central Europe probably will be completely equipped with the SS-21 Mod 2 short-range ballistic missile within the next year. The initial

	Soviet Only	Warsaw Pact Total
Active divisions a	62	93
Tank	31	43
Motorized rifle	29	46
Airborne	2	3
Sea landing		1
Mobilization bases	1	10
Equipment		
Medium tanks	19,000	28,000
Major artillery	11,000	14,500
Armored vehicles	18,500	27,750

<sup>&</sup>lt;sup>a</sup> These figures exclude numerous nondivisional maneuver units.

fielding of T-80 missile-firing tanks—viewed by the Soviets as better than the US M-1 and the West German Leopard 2—with Soviet forces in East Germany has been confirmed. Soviet divisions there evidently are the first to convert completely to self-propelled artillery. A Soviet SA-5 complex in East Germany became operational during 1984.

The USSR has largely completed a massive 10-year buildup of its logistic base in Central Europe. In East Germany, for example, pre-positioned supplies and materiel could support a force twice as large as that stationed there. This would lessen the dependence on supply lines across Poland and would enable combat reinforcements to move forward from the USSR without waiting for their supply trains.

A third Soviet Air Forces regiment for theaterwide support in Poland converted to SU-24s in late 1983, and a Soviet fighter-bomber regiment moved to Czechoslovakia in mid-1984. Two new SU-25 units—one in the Carpathian MD, the other in the Belorussian MD—are being formed. A Soviet reconnaissance regiment in Poland has been reequipped with a new MIG-25 variant.

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# Combat Aircraft in Central Europe

	Soviet Only
Fighter-interceptor	
MIG-21 Fishbed	180
MIG-25 Foxbat	65
MIG-23 Flogger	680
MIG-29 Fulcrum	65
SU-15 Flagon	36
Attack	
MIG-21 Fishbed	45
SU-7 Fitter	45
SU-17/20 Fitter	270
SU-24 Fencer	45
MIG-23/27 Flogger	400
Frogfoot	10
Reconnaissance or electronic warfare	
MIG-21 Fishbed	16
YAK-28 Brewer	65
MIG-25 Foxbat	47
SU-17 Fitter	50
Total	2,019

# Combat Helicopters in Central Europe

	Soviet	
	Only	
Attack		
MI-8 Hip	208	
MI-24 Hind	641	
Assault transport		
MI-6 Hook/Harke	83	
MI-8 Hip	418	
MI-26 Halo	27	
Total	1,377	

#### Naval Forces in the Baltic Sea

	Soviet Only	Warsaw Pact Total
Surface combatants		
Cruisers	3	3
Destroyers	13	14
Frigates	29	48
Subtotal	45	65
Amphibious ships	23	58
Attack submarines	27	30

These improvements have widened the gap in capability between Soviet and East European forces. Only the East Germans are modernizing at a comparable rate; even they are five years behind the lead Soviet units. As the gap grows through the 1980s, the Soviets may be forced in wartime to reinforce or replace some allied forces with forces from the USSR.

The East Europeans' modest efforts to modernize have included fielding some T-72 tanks, self-propelled artillery, and the new version of the BMP infantry combat vehicle. East Germany and Czechoslovakia

have received the SS-21. SA-5 complexes built in those two countries last year will be operational soon. (A Bulgarian complex is already operational.) The SA-5 complexes in East Germany (including the Soviet one) and Czechoslovakia will be able to engage high-altitude aircraft over much of West Germany east of the Rhine and over the western Baltic Sea. Czechoslovakia has received the first export of the SU-25, and late-model MIG-23, MIG-27, and SU-22 aircraft continue to trickle into other East European countries.

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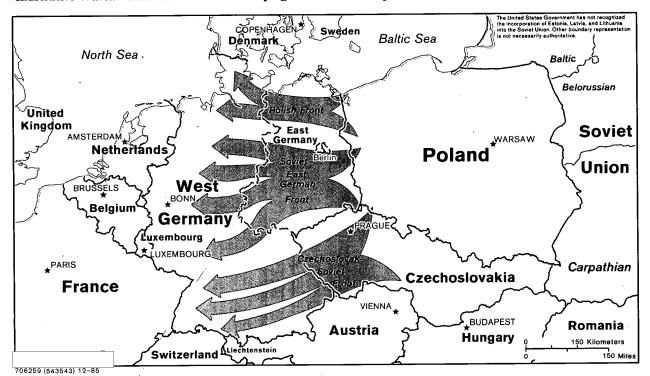
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# **Warsaw Pact Ground Forces in Central Europe**



## Illustrative Warsaw Pact Ground Force Campaign in Central Europe



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# Long-Range Theater Nuclear Forces

	Delivery	
	Systems	
Missiles		
MRBMs and IRBMs		
SS-4	112	
SS-20	252	
SLBMs		
SS-N-5	18	
Subtotal	382	
Bombers		
Air Force		
TU-16 Badger	130	
TU-22 Blinder	90	
TU-22M Backfire	82	
SU-24 Fencer	360	
Naval Aviation		
TU-16 Badger	129	
TU-22 Blinder	37	
TU-22M Backfire	102	
Subtotal	930	
Total	1,312	

Note: These figures include weapon systems with a range of at least 1,400 km that are capable of striking targets in Europe from peacetime bases or normal operating areas. They exclude strategic forces counted under SALT.

#### Long-Range Theater Nuclear Forces

Since the Soviets ended their moratorium on construction of new SS-20 bases opposite NATO in November 1983, they have renewed SS-20 base construction in the western USSR. Although they are replacing SS-4s with SS-20s on less than a one-forone basis, the SS-20s have greater range, accuracy, and survivability and have three warheads rather than one. The Soviets have increased the range and penetration capabilities of their theater bomber force by deploying more TU-22M Backfires, but the bulk of this force is still made up of older TU-16 Badgers and TU-22 Blinders. They all have sufficient range to strike almost all of Western Europe from their bases in the western USSR. Two theater-level air armies opposite NATO have completed conversion to SU-24 Fencer bombers.

#### The Reliability of the Soviets' Allies

Soviet dependence on its Warsaw Pact allies, especially in Central Europe, is so great as to make their participation in war against NATO crucial to Soviet success. The general outlook and political dependency of East European leaders on the USSR probably would lead most of them to see their interests during crises as congruent with those of the Soviets. Some members of elite groups, however, may react differently, and at the lower military levels and among the general populace behavior is less predictable.

The non-Soviet Warsaw Pact (NSWP) forces would, in the main, obey Soviet orders at least during the initial stages of a conflict with NATO. Later, they could be affected by a number of factors including:

- Perceptions of who started the war and whether it was defensive.
- The motivation and attitudes of individuals.
- The extent of NATO's efforts to induce disloyalty.
- The degree of success in early battles.

Success would be the most critical factor because a static front could quickly degrade reliability, and reverses could substantially degrade it.

The Soviets probably perceive their allies would be reliable at the start of war, but in varying degrees:

- They would regard Bulgaria and East Germany as the most dependable.
- They may be somewhat concerned about Czechoslovakia, but its regime remains politically reliable, and the population appears resigned to the Soviet presence.
- Despite having four divisions in Hungary, the Soviets may worry that geography might allow the Hungarians to keep direct engagements with NATO to a minimum.
- Their confidence in Poland's reliability probably is improving, and they would expect Poland's Army to carry out its initial wartime tasks. Nevertheless, they will continue to be wary as long as party control and labor unrest remain problems.
- The Soviets probably see Romania as least capable and reliable because of its professed defensive force structure, its failure to subscribe to the Warsaw Pact command and control system, and refusal to participate fully in exercises.

The Soviets' need for their allies' support is particularly great in Central Europe where East German, Czechoslovak, and Polish divisions make up one-third of the Warsaw Pact's ground forces and, depending on the scenario, as much as half of the first echelon. They also need cooperation in maintaining and protecting road and rail networks, particularly across Poland and Romania, to provide logistic support to combat units.

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# **Southern Europe**

#### **Ground and Air Forces**

Warsaw Pact campaigns into southern Europe would be of secondary importance to those in Central Europe. Futhermore, the mountainous terrain of southern Europe would limit the feasibility of large-scale, armor-heavy offensive operations in most areas south of the Alps. The primary mission here would be to secure the Turkish straits to keep NATO naval forces out of the Black Sea and to permit the passage of Soviet ships into the Mediterranean. Operations into Austria and northern Italy would be meant to protect the flank of Warsaw Pact forces in central Europe. A peacetime high command for this region, the Southwest TMO, apparently is being established under the leadership of General of the Army I. A. Gerasimov, who formerly commanded the Kiev Military District.

Over the last two years, the Soviets have activated one tank and two motorized rifle divisions in the Kiev MD and have established a new artillery division there and another in the Odessa MD. There are signs that a mobilization base for a motorized rifle division in the Odessa MD may be activated to upgrade the corps at Simferopol to an army. The four Soviet divisions in Hungary have converted to T-64 tanks, and those in Odessa are receiving this model.

The provision of T-72 tanks envisioned for Moscow's allies in this area has not progressed beyond the initial small deliveries. Instead, Hungary is slowly moving to refurbished T-55 tanks; Bulgaria is obtaining T-62s; and Romania, while relying on its old T-34 tanks, is producing its version of the T-55, the TR-80. Bulgaria and Hungary are coproducing the 2S1 self-propelled howitzer and fielding it with their most ready divisions. None of these efforts, however, would significantly enhance the limited contribution to a Warsaw Pact offensive by the East Europeans

# **Ground Force Strengths for Southern Europe**

	Soviet Only	Warsaw Pact Total
Active divisions a	27	51
Tank	9	12
Motorized rifle	17	38
Airborne	1	1
Mobilization bases	2	5
Equipment		_
Medium tanks	6,500	11,250
Major artillery	4,750	7,750
Armored vehicles	4,750	11,350

a These figures exclude numerous nondivisional maneuver units.

Indeed, Romania probably would not participate in an offensive. Its ground forces were reorganized in 1980 for regional defense and are among the Warsaw Pact's worst equipped and trained units for offensive operations. As a result, Romania's role, at least during the initial stages of a conflict with NATO, probably would be limited to guarding transportation routes for transiting Soviet troops.

Tactical air forces for this region also are experiencing modest improvements. A MIG-27 fighter-bomber regiment moved from the Baltic MD to Kiev MD in mid-1984, and an SU-25 Frogfoot regiment is being fielded in the Odessa MD. Hungary is buying some SU-22 Fitters, and Soviet air units in that country are receiving improved Fitters. The reconnaissance variant of the Fitter is being exported to Bulgaria.

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Combat Aircraft in Southern Eur	ope
	Sovies Only
Fighter-interceptor	
MIG-21 Fishbed	90
MIG-23 Flogger	225
SU-15 Flagon	35
Attack	
SU-17/20 Fitter	45
SU-24 Fencer	30
MIG-23/27 Flogger	90
SU-25 Frogfoot	30
Reconnaissance or Electronic Warfare	
MIG-15 Fagot	
IL-14 Crate	
L-29	
MIG-21 Fishbed	15
YAK-28 Brewer	55
MIG-25 Foxbat	26
SU-17 Fitter	62
Total	703

	Soviet Only
Attack	Omy
MI-8 Hip	20
MI-24 Hind	60
Assault transport	
MI-6 Hook	64
MI-8 Hip	131
Total	275

# Naval Forces in the Black Sea

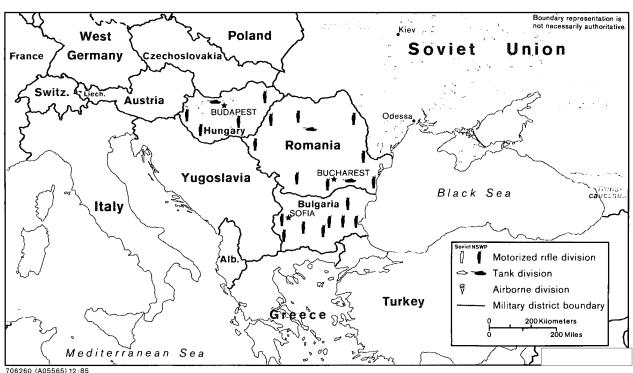
	Soviet Only	Warsaw Pact Total
Surface combatants		
Aircraft carriers	1	1
Cruisers	9	9
Destroyers	20	20
Frigates	46	51
Subtotal	76	81
Amphibious ships	11	11
Submarines	27	29

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# Warsaw Pact Ground Forces in Southern Europe



#### **NSWP Modernization Problems**

Despite Moscow's pressure on its allies to adopt Soviet operational and tactical concepts, procure modern equipment, and implement Soviet organizational models, the East European countries' poor economic performance has created a widening gap between their general purpose forces and those of the USSR. When first assigned significant offensive missions in the late 1960s, the Soviets' allies began a rapid buildup that lasted through the mid-1970s and involved acquiring older Soviet weapons on concessionary terms. Even so, they lagged neighboring Soviet units by at least five years then, and, because they have only slowly modernized since, they now are falling further behind in many categories critical to the Soviet conventional strategy.

In some countries, most notably Poland, World War II—vintage towed artillery pieces make up more than half of the inventory, and none approaches Soviet standards for acquiring modern self-propelled weapons for their maneuver divisions. Most of the countries also still rely on older towed antiaircraft guns. Their tank inventories consist primarily of T-54/55s, and some still have a few World War II—vintage T-34s in active units. None is buying the latest Soviet tank, the T-80, nor does any have enough T-72s for more than a division. Only a few have modest numbers of the

improved T-55s or T-62s. Almost 40 percent of the motorized rifle regiments still use trucks rather than infantry fighting vehicles, and most divisions lack attack helicopters.

Sixty percent of NSWP aircraft are models introduced more than 15 years ago. Although some East European states have spent heavily on aircraft since 1979, they are not matching Soviet gains, because they tend to buy modernized versions of older models rather than the most advanced new Soviet aircraft.

Over the past decade, the Soviets have addressed these problems by encouraging modernization in selected systems, especially SAMs, and by pushing integration and standardization in Warsaw Pact defense industries to lower costs. Nevertheless, as the USSR's force improvements further outstrip those of its allies, the Warsaw Pact will find it harder to maintain common training standards and to uniformly improve firepower, mobility, and survivability. In a Warsaw Pact campaign, the more poorly equipped forces would be less capable of exploiting breakthroughs, protecting a front's flanks, and defending against airstrikes and counterattacks. To avoid this, Moscow may take over some of the wartime missions now assigned to its allies.

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# Illustrative Warsaw Pact Ground Force Campaign in Southern Europe



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Southwest Asia		
Ground and Air Forces	Combat Aircraft in Southwe	est Asia
The Soviets continued to focus on Afghanistan, while	Fighter-interceptor	**************************************
making improvements to their forces opposite Iran.	MIG-21 Fishbed	90
They have augmented their forces in Afghanistan and	SU-15 Flagon	36
conducted larger offensive operations, but have	MIG-23 Flogger	225
achieved little progress against the resistance. The	Ground attack	
Soviets have vented their frustration in increasingly	SU-17 Fitter	315
harsh demarches to Pakistan, demanding an end to	SU-24 Fencer	60
aid for the rebels.	SU-25 Frogfoot	70
	MIG-23/27 Flogger	175
The Soviets continue to make marginal improvements	Reconnaissance or electronic warfa	are
to the ground forces in the southern USSR, but	YAK-28 Brewer	14
training, readiness, and capabilities have not been	SU-17 Fitter	28
significantly enhanced. There were scattered improve-	Total	1,013
ments in holdings of combat vehicles, artillery—including the introduction of some self-propelled models—and communications equipment.	Note: This table includes 30 fighter and 15 reconnaissance or electronic Afghanistan.	
Since 1980 there has been a significant increase in		
tactical airpower supporting the ground forces. Five		
regiments in the Transcaucasus MD and three more in the Turkestan MD have converted to a ground	Combat Helicopters in Sout	hwest Asia
attack role as part of the Air Force reorganization.	Attack	
One regiment in the North Caucasus MD converted	MI-8 Hip	32
in 1984.	MI-24 Hind	171

38 a
2
33
3
4
8,000
6,000
11,750

<sup>&</sup>lt;sup>a</sup> Independent brigades and regiments in Afghanistan are the equivalent of two additional divisions.

Attack	
MI-8 Hip	32
MI-24 Hind	171
Assault transport	
MI-6 Hook	123
MI-8 Hip	323
Total	649

Note: These figures include 120 ground attack and 90 assault transport helicopters in Afghanistan.

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Naval Forces	Naval Forces in the Indian	Ocean	
The Soviet Navy's presence in the Indian Ocean, which had grown to over 30 units during the crisis		Typical Strength	
between Iran and the United States, has since de-	Aircraft carriers	0	
clined and stabilized at a level of about 25 units. Gifts	Principal surface combatants	3	
of naval and aviation fuel to the Seychelles and an	Amphibious ships	2	
increasing number of port calls there, including some	Attack submarines	2	
requested by President Rene to support his regime,	Total	7	
have not yet led to access to naval support facilities on the islands.			25 <b>X</b> 1 25 <b>X</b> 1
The Indian Ocean Squadron continued to monitor US naval forces, especially those operating in the Arabian	Facilities in	the Indian Ocean Area	
Sea, and to patrol the Bab el Mandeb, at the southern	Aden and Dahlak Island p	rovide limited shore facili-	
end of the Red Sea, but it has not become involved in	ties for the Indian Ocean S		
the Iraq-Iran war. The squadron's ships do not oper-	to have virtually unrestrict		
ate like those of the US Navy; instead, they spend	normally call there for rou		•
most of their time at anchor or in port at Dahlak	nance during long deploym	nents in the Indian Ocean.	
Island, Ethiopia, at Aden, South Yemen, or at an-	The Soviets hav	e asked for access to other	25 <b>X</b> 1
chorages off Socotra Island.	ports in the Indian Ocean-	-notably in Madagascar	25X1

been replaced

The Soviets kept four IL-38 naval reconnaissance

aircraft in the region, two in South Yemen and two in

Ethiopia, until May 1984, when the two in Ethiopia were destroyed by Eritrean rebels. The IL-38s in Aden appear to be covering some of the area formerly patrolled by those in Ethiopia, which have not yet

ports in the Indian Ocean—notably in Madagascar and the Seychelles—but thus far without success. In March 1985, however, they briefly deployed two ASW aircraft to Mozambique.

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#### Soviet Ground Forces in Southwest Asia



# The War in Afghanistan

Despite over five years of military operations, the USSR remains unable to defeat the Afghan insurgency. Reflecting leadership concern, a group of senior Soviet officers led by Marshal Sokolov (who later became Minister of Defense) spent six months in 1984 in Kabul assessing the situation and planning the spring and summer campaigns. The Soviets augmented their forces in Afghanistan by about 3,000 men in March and April 1984 and have steadily deployed newer combat and support equipment. The Intelligence Community estimates that, if all Soviet units there were fully manned at authorized strength, Soviet personnel would total 115,000.

The cease-fire in the Panjsher Valley (in effect for over a year) ended in April 1984, when Soviet and Afghan forces conducted their seventh major offensive in that key area. The operation, the largest to date in Afghanistan, involved some 20,000 troops and included an unprecedented high-altitude bombing campaign by

TU-16 Badger and SU-24 Fencer bombers operating from bases in the USSR. The bombing was largely ineffective, and the effort to bring major insurgent units to battle was unsuccessful. Soviet and Afghan forces have expanded their forces permanently garrisoned in the Panjsher and somewhat reduced the level of rebel attacks along the main highway from the Soviet Union to Kabul.

The Soviets continued making efforts to improve their counterinsurgency capabilities—replacing tank units with motorized rifle units, bringing in heavier artillery, and deploying better signal intercept equipment. They also focused considerable attention on trying to improve their intelligence collection and processing organization but without apparent success. In August 1985 they assigned former GSFG Commander, Army General Zaytsev, as TMO Commander to help improve their situation in Afghanistan.

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# Illustrative Soviet Ground Force Campaign in Southwest Asia



#### East Asia

#### **Ground and Air Forces**

The Soviets continue to expand and modernize their ground forces in East Asia. They have concentrated much of their effort in the Transbaikal MD, converting a mobilization base to a low-strength motorized rifle division and adding more capable systems, such as the T-72 tank, BTR-70 APC, and self-propelled artillery. Two maneuver divisions in this MD are now equipped with T-72s, and over 30 percent of the troop carriers are BTR-70s. Last year 15 percent of the artillery in the Transbaikal MD was self-propelled, compared with only 5 percent in the Far East MD. Two Soviet SA-5 complexes in Mongolia became operational during 1984.

An air army at Irkutsk would provide support for the ground forces in wartime. One of its regiments recently converted from an interceptor to a ground attack unit. The Soviets also are reequipping a fighter-bomber regiment with SU-24 Fencers. Since 1980, one new fighter-bomber regiment has been added, and two fighter regiments have converted to ground attack missions. Strategic Air Army bombers and fencer fighter-bombers based east of the Urals also would be used in a war in this area.

The Soviets have largely filled out their combat forces in East Asia and now are improving the combat support and rear services. To reduce the need for shipments from the western USSR, they have augmented motor transport and divisional depots. In the Transbaikal MD, the Soviets have more than doubled their supplies of conventional ammunition for fronts and armies since the mid-1970s, and they are increasing their nondivisional fuel depots.

Ground Force Strengths for East Asia		
Active divisions	46	
Tank	6	
Motorized rifle	40	
Mobilization bases	3	
Equipment		
Medium tank	13,500	
Major artillery	8,500	
Armored vehicles	15,750	

Fighter-interceptor		
MIG-21 Fishbed	45	
SU-15 Flagon	160	
MIG-25 Foxbat	32	
MIG-23 Flogger	339	
MIG-31 Foxhound	8	
Attack		
MIG-21 Fishbed	45	
SU-7 Fitter	45	
SU-17 Fitter	225	
SU-24 Fencer	100	
MIG-23/27 Flogger	180	
Reconnaissance or electronic warfare		
MIG-21 Fishbed	32	
YAK-28 Brewer	38	
MIG-25 Foxbat	42	
SU-17 Fitter	32	
Total	1,323	

Attack	
MI-8 Hip	126
MI-24 Hind	330
Assault transport	
MI-6 Hook	114
MI-8 Hip	336
Total	906

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#### **Naval Forces**

Modernization of the Pacific Fleet has proceeded apace, with the receipt of additional D-III-, V-III-, K-, and Akula-class submarines. This fleet now has about 40 percent of the Navy's sea-based strategic strike force. Its ASW capabilities also rose with the arrival of a second Kiev-class aircraft carrier, the Novorossiysk, and it has completed the formation of a second Backfire regiment for a total of 40 aircraft.

Soviet Naval activity outside home waters continued to increase in the Pacific—particularly in the South China Sea—and to decrease in the Indian Ocean. In 1984 the Soviet Pacific Fleet conducted major exercises in the spring and fall in the Sea of Japan and Sea of Okhotsk areas around a defense of the homeland" theme. Fleet forces also conducted maneuvers in the Northwest Pacific and reacted vigorously to several US naval exercises. In addition, the Soviets conducted their first amphibious exercises in the South China Sea with a force led by the aircraft carrier Minsk and a Rogov-class amphibious assault ship in March and April 1984.

Intelligence-collection ships continue to conduct surveillance of US forces in the Pacific and periodically operate with V-III SSNs to monitor activities near the Puget Sound Trident SSBN base. Cruise missile submarines made several patrols off the US West Coast as part of the "analogous response" to new US missiles in Europe.

# Naval Forces in East Asia

	Typical Strength
Surface combatants	
Aircraft carriers	2
Cruisers	14
Destroyers	14
Frigates	50
Subtotal	80
Amphibious ships	18
Attack submarines	93

Note: These figures exclude ships in reserve and those normally deployed in the Indian Ocean (see page 69.)

# Long-Range Theater Nuclear Forces

	Delivery Systems
Missiles	
IRBMs	
SS-20	162
SLBMs	
SS-N-5	21
Subtotal	183
Bombers	
Air Force	
TU-16 Badger	57
TU-22M Backfire	40
SU-24 Fencer	90
Naval Aviation	
TU-16 Badger	67
TU-22M Backfire	40
Subtotal	294
Total	477

Note: These figures include weapon systems with a range of at least 1,400 km that are capable of striking targets in the Far East from peacetime bases or normal operating areas. They exclude strategic forces counted under SALT

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#### **Soviet Ground Forces in East Asia**



#### The Soviet Presence in Vietnam

Since 1979 the Soviets have steadily built up their presence at the naval base and airfield at Cam Ranh, Vietnam, their only permanent base outside the USSR. From here they can

project military power into the South China Sea, and be ready to augment their naval presence in the Indian Ocean more quickly in response to crises. The Soviets now treat their naval forces in the area of Vietnam as a squadron similar to those in the Mediterranean Sea and Indian Ocean.

The Soviets have been keeping three to five submarines, five to seven surface combatants, and 12 to 17 auxiliaries at Cam Ranh. Most ships transiting between the Indian Ocean and Pacific Fleet bases stop there, and occasionally task forces led by major combatants, such as the aircraft carriers Minsk and Novorossiysk, operate in the area. Although Soviet ships berth at Cam Ranh's priers, they receive power and water from shore but otherwise rely primarily on their afloat logistic system. Some auxiliary ships undergo maintenance at Ho Chi Minh City. In April 1984, Soviet naval forces joined Vietnamese forces near Haiphong in a combined amphibious exercise. In May, however, their reaction to the increase in tension between China and Vietnam was low key.

The naval air presence has grown substantially recently. The number of long-range Bear aircraft on rotation to Vietnam doubled from four to eight in the summer of 1984 but later dropped to six, which are divided between reconnaissance and ASW variants. A squadron of TU-16 Badger bombers transferred to Cam Ranh in late 1983, and seven more Badgers arrived in November 1984, bringing the total to 16. Eventually, a full regiment of about 30 aircraft probably will be based there. Although no match for US forces in the Philippines, the Badgers still complicate US military planning and pose a threat to other countries in the region, especially China.

In December, a Soviet cargo ship delivered a squadron of 14 MIG-23 interceptors to Cam Ranh. These fighters probably will take over air defense responsibilities from Vietnamese forces to protect the growing Soviet presence at Cam Ranh.

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